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ORIGINAL ARTICLES.

MARTIAL MEDICATION.*

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The various preparations of iron are often spoken of as "chalybeates," the term being derived from the name of an ancient nation, the Chalybes, which occupied Pontus in Asia Minor, and was celebrated for its mines and its manufactures of steel. These preparations are so numerous that one is often at a loss to choose from among them. The consequence of this *embarras de richesses* is that the majority of practitioners have one favorite preparation or, at the most, two or three which they are in the habit of prescribing to the exclusion of all others. This, it is scarcely necessary to say, is unscientific, for the preparation should be adapted to the individual case and not, as in the method referred to, the case to the individual preparation.

The physical properties of a chalybeate, its solubility, taste, dose and re-action, are all to be taken into consideration before prescribing one. The same statement is, no doubt, applicable to other drugs, but it is especially true of the chalybeates on account of their wide diversities in the above-mentioned properties. For example, in

prescribing for a child, we are handicapped by the fact that very few young children can swallow a pill, while all will object to nearly every salt of iron in solution, no matter how pleasantly, from an adult standpoint, the mixture may be flavored. We must, therefore, select a comparatively tasteless preparation, such as the *ferrum dialysatum* which, mingled with simple elixir, will be readily taken by most children, and the same is true of the syrup of the iodide of iron. It is fortunately the case that the latter preparation is one which is particularly beneficial in the anemia of childhood, especially if, as is often the case, it is associated with the signs and symptoms of scrofula. The insoluble preparations of iron, especially the *ferrum redactum*, which is almost tasteless, may be given to children, mixed with chocolate in the form of a troche or lozenge. In this form it is often taken with avidity.

One of the most important properties of a preparation of iron is its reaction. For example, the well-known tincture of the chlorid, or as it used to be called generally and still is by many of the older practitioners, the muriated tincture, contains an excess of HCl. It is owing to

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this excessive acidity that it is so markedly beneficial in some cases, and equally injurious in others. As you are all aware the acid of the gastric juice is HCl, and there are well defined forms of dyspepsia of which the essential chemical feature is the diminution or absence of this acid. They are technically described by writers on diseases of the digestive system as cases of "anacidity," the nature of the defective acid not being stated, because it is taken for granted that every one admits the acid of the gastric juice to be HCl. These cases of anacidity are frequently associated with anemia, and, therefore, no better preparation of iron can be employed in their treatment than the tincture of the chlorid.

This tincture, which is one of the oldest of the chalybeates, and has been employed for many years empirically, that is to say, as the result of experience, is shown by recent researches on the chemistry of digestion, to be just what is needed to fulfill the indications in many cases of indigestion. On the other hand, however, it may do harm, for there are forms of dyspepsia in which the gastric juice contains an excess of acid; cases of hyperacidity, as they are called. In such cases, if a chalybeate is prescribed, it should be of neutral or alkaline reaction.

These considerations, which are by no means theoretical, but are based on the results of clinical experience, show that iron is not to be prescribed in a haphazard manner, but that, on the contrary, the selection of a chalybeate should be made carefully, and as the result of a thorough diagnosis.

Therapeutic Action of Iron.—The mode in which iron exerts its beneficial effect has long been, and still is, a subject of discussion, and marked differences of opinion prevail with reference to it. On superficial consideration it would seem that iron acts simply as a food. This opinion, which is maintained by some, arises from the well-known fact that iron is a constituent of the blood, being intimately combined with the hemoglobin of the red corpuscles, and is also found in the muscles and in the various secretions and excretions. It may be laid down as a rule that wherever there is pigment or coloring

matter, iron will be found, for all the pigments of the body, such as those which give the muscles, the liver, the choroid coat of the eye, etc., their characteristic tints, are derived from the disintegration of the red blood corpuscles, and, as a necessary consequence, contain iron.

In anemic conditions iron is deficient in the system, and especially in the red corpuscles and under such circumstances, if iron is administered, the blood may rapidly replace its deficit in that metal. Surely, it might be said, in such cases, in prescribing iron, we simply administer a food, for want of which the blood and the tissues are starving. Nothing, apparently, could be more justifiable than such a conclusion. When, however, we recall the fact that our food, when in proper amount and quality, contains far more than enough of iron for the purposes of nutrition, and that human milk, which contains a mere trace of iron, yet contains more than enough to supply the wants of a rapidly growing organism, as proved by the fact that iron may be found in the feces of a nursing child—when, I say, these facts are borne in mind, it becomes evident that the causes of anemia are not so much due to the want of iron in the food as to something that interferes with its assimilation.

There are other interesting facts which corroborate this view of the cause of anemia (more especially chlorosis), and, therefore, throw light on the *modus operandi* of iron. In the first place, the blood of a healthy, vigorous adult contains only about forty-five grains of iron, so that, in severe cases of chlorosis, there may be a deficit of less than one scruple of this metal. Why then is it often necessary to administer large doses of iron, and why are the most insoluble preparations, such as iron filings and reduced iron, frequently, and according to some authorities, among them Trousseau, invariably the most efficacious?

Until quite recently, it was supposed that the theory of Bunge afforded a satisfactory answer to these questions. According to this theory the essential feature of chlorosis is a disorder of digestion attended with the excessive formation of sulphuretted hydrogen and alkaline sulphids in the intestinal canal. These substances combine with the organic iron contained

in the food and render it incapable of absorption. This theory also offers an explanation of the well-known fact that it is sometimes necessary to administer large doses of iron before the desired effect is obtained. In such cases it is supposed that the formation of sulphuretted hydrogen is unusually great and requires corresponding quantities of iron to neutralize it.

There are, therefore, two assumptions in Bunge's theory:

1. That there is an unusual amount of decomposition in the intestine of chlorotics.
2. That iron sulphid is not absorbed, or, at least, is inert in chlorosis.

Now both of these assumptions have been shown to be erroneous.

Excessive decomposition of albumin in the intestine or, in other words, the presence in that canal of an unusual amount of sulphuretted hydrogen, is invariably indicated by an increased percentage of ethylsulphuric acids in the urine. The crucial test of Bunge's theory is, therefore, the determination of this percentage in a considerable number of cases of chlorosis. Rethers, of San Francisco, working under the direction of von Noorden at Berlin, determined the percentage of ethylsulphuric acids in eighteen cases of severe chlorosis and found not only that these bodies were, as a rule, not increased, but also that they were often present in unusually small amount. He also ascertained that the decomposition of albumin in the intestine is not influenced by the administration of iron. These facts are at least sufficient to weaken, if not to overthrow, Bunge's theory, and recently Ralph Stockman, of Edinburg, has contributed another which overthrows the second assumption that it contains: namely, that iron sulphid is inert in chlorosis.

Stockman* reports several cases of chlorosis, treated successfully with ferrous sulphid. To obviate the criticism that the ferrous salt would be converted into a chlorid in the stomach and that, therefore, his treatment was the same as if he had given a chlorid from the start, he gave the drug in keratin capsules. Keratin is a substance that is not acted on by the acid of the gastric juice, but is dissolved

by the alkaline juices of the intestine. In such capsules ferrous sulphid may be conveyed intact to the duodenum.

The same observer (Stockman) has treated a number of cases of chlorosis with drugs, such as the preparations of bismuth, which are quite as capable of absorbing H_2S as is iron, and in no instance were the patients benefited until iron was added or substituted.

The above-mentioned facts are universally acknowledged to be fatal to Bunge's theory of the *modus operandi* of iron. It has been supposed that iron acts by stimulating the anemic intestinal mucous membrane to absorption, but this is disproved by the fact that chlorosis may be cured by the hypodermatic administration of the metal. Another theory which deserves mention is that of Haig, who believes that iron acts by clearing the blood of uric acid. He claims that the favorable results obtained by the use of iron may be neutralized by the administration of uric acid, and that other drugs besides iron, which clear the blood of uric acid, are curative in cases of chlorosis. Among such drugs are the preparations of mercury and salicylic acid. Haig's paper† is certainly suggestive, but his conclusions are at variance with those of clinicians who, like Germain Sée, recommend a raw meat diet in cases of chlorosis.

It is manifest from the foregoing that the *modus operandi* of iron in those conditions for which it is most frequently prescribed is in need of further elucidation. There is one point in which my experience coincides with that of Stockman, and that is that the inorganic preparations of iron are most efficacious in chlorosis. So far as iron is concerned, the efforts of the pharmacists seem of late to be directed toward the production of preparations which resemble the organic iron compounds of the food. Now this seems to me a misdirection of endeavor, for the essential pathologic feature of chlorosis lies in the fact that the abundant organic compounds of iron in the food are not absorbed. If the chemist should succeed in producing an organic compound of iron precisely identical with that in human

* *British Medical Journal*, April 29, 1893.

† *British Medical Journal*, July 21, 1894.

milk, which conveys to the nursing child a superabundance of iron, it is self-evident that his preparation would be therapeutically inert in cases of chlorosis and, perhaps, in all other anemic conditions.

Indications for the Use of Iron.—The chief indications for the use of iron are furnished by anemia, and especially by that form of anemia called chlorosis. This affection, in its incipency, is characterized by a normal number of corpuscles, each one of which is deficient in hemoglobin, which is the chief iron-containing constituent of the body. In this disease iron is a specific, and the demand for it is so imperative that it seems immaterial what preparation be employed. There is, however, always room for selection, some patients being unable to tolerate any but the blandest preparations, such as the lactate, or the potassio-tartrate; while others experience no inconvenience from the use of the sulphate, the saccharated carbonate, or the ferrum reductum.

If the tongue is heavily coated, the breath offensive and the bowels constipated, the administration of the iron should be prefaced by a purge. In some cases, however, even though there be no sign of digestive disorder, the stomach will not tolerate any but the blandest preparations, such as the lactate, or the potassio-tartrate, which is the least constipating of the various preparations of iron. When well borne, one of the best preparations of iron is the sulphate. It is generally administered in pill form, with equal parts of potassium carbonate. Such a pill, first recommended by Bland, and therefore, known as Bland's pill, was held in great esteem by the late Professor Niemeyer, to whose endorsement its general use is largely owing.

In anemia, dependent upon malarial poisoning, iron may be advantageously combined with quinine, or arsenic. The citrate of iron and quinine, or the arseniate of iron (the latter in doses of one-fortieth grain, three or four times daily; the former in doses of two to five grains, thrice daily), may be employed under these circumstances.

In the anemia, which is so common an attendant of syphilis, an excellent combination is the tincture of the chloride of

iron and corrosive sublimate, as in the following prescription:

R, Tinct. Ferri Chlorid, ℥ss
Hydrarg. Chlorid Corrosiv, gr. i.
Glycerin, ℥ss
Aque, ad. ℥iii

S.—One teaspoonful in water, thrice daily, after meals.

In sloughing, phagedenic chancre, the potassio-tartrate of iron has been employed with apparent benefit.

In the *anemia of heart disease*, which is often quite prominent, so much so, that a "cardiac cachexia" is described by some writers on diseases of the heart, iron may be combined with digitalis. The two drugs may be given in pill form, in which case the powdered digitalis would be employed; or the tincture of the chlorid of iron and the tincture of digitalis may be mingled in the same prescription. The mixture is certainly not an elegant one, owing to the tannin contained in the digitalis, but there is no doubt as to its therapeutic activity in suitable cases.

Amenorrhœa and Menorrhagia.—Iron is largely used as an emmenagogue, but is only efficacious in such cases of menstrual suppression as are due to an impoverished state of the blood. On the other hand, in certain cases of chlorosis there may be a tendency to excessive menstrual discharge, these cases being designated by the term "chlorotic menorrhagia." For the cure of this form of menorrhagia, iron is the best remedy, and the more astringent preparations, such as the tincture of the chlorid, or the liquor ferri nitratis, should be employed. It is scarcely necessary to say, that before prescribing iron in such cases, the physician should be assured that the anemia is the cause and not the consequence of the menorrhagia.

Rheumatism.—Iron was at one time much employed in the treatment of rheumatism, but has been entirely superseded by the salicyl compounds. It is, however, an excellent prophylactic against relapse, and for this purpose a non-official preparation, iron salicylate, may be employed for some weeks after recovery from the attack.

Erysipelas.—The tincture of iron chloride was at one time regarded as a specific in the treatment of erysipelas, and it is

still largely employed in this disease. To obtain good results, it must be given freely; that is, to the extent of at least one or two drams daily. It has been given in much larger doses, and it is claimed, with benefit. For example, Mr. De Morgan, of the Middlesex Hospital, London, has given so much as two ounces of this drug in twenty-four hours in cases of erysipelas. While benefit seems to have been derived from this method of treating erysipelas, it is a significant fact that it is most marked when the internal use of iron is combined with external applications, and especially such as exclude the air from the affected region.

Neuralgia is often dependent upon anemia, and when this is the case iron will be found of service. The saccharated carbonate is a favorite preparation in such cases, but the necessity of administering it in huge doses, as is done by some practitioners, is doubtful. This salt has been prescribed in doses of half a dram thrice daily. Since, as I have already stated, there exists in health only forty-five grains of iron in the blood, it is impossible for more than a fraction of these doses to enter the system.

Chorea, when associated with anemia, may be successfully treated with iron, and in this disease, also, the saccharated carbonate has been given in the same large doses.

It is impossible to enumerate all the diseases for which iron has been administered with more or less benefit. The above-mentioned affections are those in which the remedy is most efficacious. The topical uses of iron are almost as important as the internal. In the form of Monsel's Solution (liquor ferri sub-sulphatis), it is probably the best styptic remedy in the pharmacopeia. It may be successfully employed to check hemorrhage in cases of cancer of the cervix and in bleeding piles. It has also been injected into the uterus in cases of post-partum hemorrhage, but this practice can scarcely be recommended, as this salt of iron coagulates the blood in the uterine sinuses, and these coagula by their decomposition may give rise to septic infection. The topical effect of iron is not only manifested externally, but it is highly probable

that its stimulant effect upon the appetite and digestion is in part due to its astringent and tonic action upon the gastric mucosa. This same astringent action renders it of great service in many obstinate forms of diarrhea, especially in children. I have found the liquor ferri pernitratis successful in checking diarrhea which had resisted bismuth, opiates and the vegetable astringents.

Incompatibles.—All the preparations of iron are incompatible with the vegetable astringents; in other words, with tannic or gallic acid on which this astringency depends. They may, however, be administered with the infusions and tinctures of quassia and calumba.

Man in the Glacial Period.

The latest evidence as to the occurrence of man in the glacial period has just appeared in the *American Geologist*, where Dr. E. W. Claypole records the finding of a grooved stone axe at a depth of 22 feet in the drift of north-central Ohio. The axe, which was partially embedded in boulder clay, lay in a bed of coarse gravel one foot in thickness; above this was a bed of silt 13 feet in thickness, and very tough below; embedded in this were streaks of sand; finally, there was superimposed 8 feet of clay. Dr. Claypole regards these beds as having been "the deposits of the torrents of water and the still pools which characterize the flow from the front of a glacier in a flat country." He supports his statement by a description of the district, and also enters into the *bona fides* of the discoverer of the implement. The axe was made of a hard, banded green slate, but it was oxidized throughout, owing to the sulphurous character of the water in the gravel; the concentric lines of color (limonite stains) parallel to the contour of the implement prove that the change has taken place since it was fashioned by its neolithic maker, and the rotten state of the stone shows that it must have been embedded in the gravel for a very long time. It is always a difficult matter to sift the evidence of such finds, but this one seems to be worthy of the critical examination of American geologists and archeologists.

CURABILITY OF BRIGHT'S DISEASE.*

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I have long held that most cases of Bright's disease of the kidneys are curable, but that there is necessity for prolonged care and treatment to secure this most desirable result.

In a paper read before this society about twelve years ago, I enforced similar views. My experience since that time has served to prove the importance of the principles of treatment and general management then urged. The point upon which I insisted on that occasion was that care and treatment should not be relaxed for at least one month after every vestige of the disease had disappeared. Two or three months would be safer than one. Writers whom I have consulted do not, it seems to me, impress with sufficient emphasis the very great importance of preventing a relapse or recurrence of the inflammation or engorgement of the kidneys, which is the essence of the disease in question. When we reflect that each recurrence of the pathologic condition yields less readily and thoroughly to treatment than the former attacks, until finally the lesions are irrevocably fixed, we can appreciate the importance of so guarding our patients that recurrent attacks shall be reduced to the lowest possible percentage. Even so careful an author as Prof. Osler dismisses this point with the remark that "the patient should be kept in bed until all traces of the disease have disappeared."

As the prognosis and treatment depend very much upon the form of the disease present in the case in hand, it may be best to advert briefly to the classification made by the best modern authors. Practically the cases may all be ranged into two classes—acute catarrhal nephritis and chronic parenchymatous nephritis. Of the latter there are, perhaps, three varieties that are the result of accidental pathologic conditions present:

1. The large white kidney in which the interstitial tissue is increased.

2. The small white kidney. In this there is contraction of the interstitial tissue. The kidney becomes harder and there are apt to be areas of fatty degeneration. Hematuria is occasionally present. The contracted or cirrhotic kidney seems an advanced stage of this variety. It is apt to occur in gouty subjects and to be accompanied by a general arterial sclerosis.

3. The amyloid kidney is a degeneration that may accompany any form of nephritis and is a usual attendant of prolonged suppuration. Unless the suppuration process is within the reach of treatment the amyloid changes go on and join in producing the inevitable fatal result.

Chronic parenchymatous nephritis is the usual termination of acute Bright's disease, unless this is radically cured before the changes that mark the former disease are established.

The prognosis in chronic Bright's disease is extremely grave. Osler says, "When it has persisted for more than a year recovery rarely takes place. Occasionally in children the symptoms disappear and recovery takes place after the disease has persisted for two years or even more." I remember two cases in one family in which decided traces of albumin were found after two years. The children were from six to eight years of age. The younger one is now thirty-five years old, and both have perfect health.

In reading the article upon acute Bright's disease, by Dr. Delafield, of New York, in Pepper's System of Medicine, I was much impressed by his arrangement of the cases of this disease in two groups based upon their mode of attack. In the first, the invasion is acute: "A person in good health after exposure to cold and wet is attacked with rigors, followed by fever and pain in the back. There will be frequent and painful micturition—the

* Read before the Chester County Medical Society, January 12, 1897.

urine being passed by drops or it may be suppressed. It is usually bloody or of a brown smoky color; low specific gravity; contains a very large amount of albumin and numerous casts, generally epithelial or bloody. Dropsy quickly supervenes, and, involving the head, face and neck, causes great distortion of features. Complicating inflammations are apt to come on. Most cases recover under appropriate treatment. Cerebral symptoms almost always occur in the fatal cases.

"In the second set of cases, the invasion is not acute, and the symptoms at first are so slight that they are apt to escape notice. Usually they are referred to the stomach. Anorexia and tendency to vomit are generally present with some pain in back and great languor. The urine becomes scanty, rather smoky, but the amount of albumin at first is moderate, with some blood and casts. Dropsical symptoms come on more slowly than in the first group of cases. The patient becomes very anemic. Under careful persistent treatment very many of the cases recover completely."

These observations of Dr. Delafield correspond with my own clinical experience, and I am strongly inclined to the view that a great many of the fatal cases of chronic Bright's disease have their origin in this latter group recognized by Dr. Delafield, and that the fatal result is reached only because the true nature of the case is not recognized, or, at least, that the rigid course of management necessary to stem the destructive progress of the disease is not enforced until irreparable mischief is done to the kidneys.

A case of this kind came under my care in the spring of 1884. The subject was a man aged sixty-four, whose previous health had been fair, though he had been subjected to considerable mental wear from invalidism in his family. The first symptoms noticed were marked languor, dyspeptic trouble and pain in the back, with smoky and scanty urine. These symptoms with slight edema of the eyelids led to an early examination of the urine and this revealed rather low specific gravity, some blood and casts, epithelial and hyaline. There was a large amount of albumin. The edema increased rapidly, pain in head and back were prominent, and there was

at times tendency to stupor. The dropsical symptoms became urgent. Besides extensive anasarca there was ascites and edema of the lungs. The languor and weakness were extreme.

Careful treatment was early instituted and carried out persistently till all evidence of disease of the kidney was eradicated. He was kept in bed and between blankets from May 1 to near the middle of July. Hot-air baths were freely used, aided by Dover powders and spirits of nitre. He was freely purged with elaterium at least twice a week for several weeks, and always with a favorable impression upon the pain in the back and the dropsical effusion. In the latter part of the case large doses of tr. ferri chlor. were used steadily and with marked effect.

At the end of eight weeks the urine was absolutely clear of albumin, and up to this time, a period of twelve years, there is no evidence of any return, and his general health is not at all impaired. During most of the treatment he was kept strictly upon a diet of milk, and buttermilk, and a few vegetables were allowed towards the end of the case.

We have seen that in the cases clearly recognized as acute Bright's disease, recovery under careful management is the rule. But when the epithet chronic comes to belong to them the aspect is wholly changed. By common consent the doom of the subject is considered sealed. Why is this? What essential difference is there in the pathology or in the morbid anatomy that this strong contrast in results has come to be so thoroughly accepted? Is there *ab initio* a difference in the nature of the cases? or is it wholly that the accepted time for effective treatment has been allowed to pass unimproved? Is there a point in the pathologic change incident to inflammation of the tissues of the kidneys at which we are powerless to stop its destructive progress?

We have seen that acute inflammation, catarrhal in its character, affecting first the tubules and next the glomeruli, but surely involving, if not checked, the whole tissue of the gland, constitutes the morbid condition attending acute Bright's disease.

Some writers claim that it is catarrhal troubles alone that are present in the

disease, but all recent writers admit, in the language of Tyson, that while "the interstitial changes are not present in the earliest stages, sooner or later such changes do present themselves, and it is a matter of duration of the disease as to whether they appear or not. If the disease continues for three months, they certainly will have made their appearance."

In the albuminuria of scarlatina and others of the exanthemata, and that induced by irritating agents, there is present from the onset acute diffuse nephritis.

Valvular disease of the heart is frequently a cause of interstitial nephritis. The kidneys in these cases are usually enlarged, dark red or bluish, and congested. This is called the cyanotic kidney. The reciprocal relation of cardiac disease and chronic Bright's disease presents a most interesting field for study. This relation is not yet fully ascertained. It is to be hoped the active spirit of research, so marked in the later history of medicine, will do much to clear it up.

Da Costa and Longstreth, in a paper published in the *American Journal of Medical Science*, have described "as more or less constant in Bright's disease, and especially in the contracted kidney, certain changes in the nervous renal ganglia, which consist essentially in a hyperplasia of the connective tissues and a fatty degeneration of the nerve cells." They say that while this lesion may be looked upon as forming a part of the general process of degeneration in connection with the kidney disease, they think it is the cause of the renal malady, and precedes the degenerative changes, and also that the diseased condition of the ganglia furnishes the clue to the alteration of the vessels of the kidneys, and finally, that similar changes producing similar results may exist in other ganglia, "for instance, in the cardiac plexes, explaining the hypertrophy of the heart."

These observations suggest the importance of means calculated to improve the nutrition of the ganglionic centres, such as small doses of mercuric chlorid, and of pancreatized cod-liver oil.

Such being the gravity of the chronic condition, it behooves us, by the most care-

ful study of each case, and the most rigid and unremitting care in treatment, to wipe out every trace of the disease and enforce the most unyielding care until the conditions of health are so firmly established, that a recurrence is not likely to take place. The patient must be made to appreciate the danger of relapses establishing the chronic and fatal character of the disease. He must be able fully to measure the potency of exposure to cold, especially after fatigue, in developing the original attack, and most especially in causing relapses. He must understand the importance of always wearing woolen clothing next the skin, the avoidance of extreme fatigue, of immoderate meals, and to shun the use of alcohol, especially malted drinks. Train him to constant vigilance upon all these points, so he shall put no extra burden on his kidneys, and this should be made the habit of life.

Besides the foregoing, most frequent causes of acute Bright's disease, to which I have adverted, there are several others, less potent, but requiring attention:

1. The poisons of the eruptive fevers, especially scarlet fever. These interfere with the eliminative action of the skin, and in this way throw an increased burden upon the kidneys.

2. Certain toxic agents. These act most likely from the direct irritation caused by their elimination by the kidneys. The most frequent of these are cantharides, turpentine, potassium chlorate, carbolic acid and iodoform.

3. Pregnancy by compression of the renal vessels often causes acute nephritis, though undetermined toxic agents may be an additional factor in these cases.

4. Extensive lesions of the skin sometimes cause acute Bright's disease, as in extensive burns and certain diseases of the skin.

I shall not dwell at length upon the pathology of this disease. The exact tissue first involved is probably not always the same, and it is not possible or even important so far as treatment is concerned to determine this point. I shall make no attempt to do so in this paper. Indeed, this part of the subject has been so thoroughly studied by many excellent writers upon it, that I cannot do better than refer you to their admirable papers.

Nor is it within the scope of this paper to take up at length the symptoms or points of diagnosis. There is usually little trouble with any one sufficiently posted in medicine to practice safely in recognizing the disease when present. What I am after now is to have you cure every case of Bright's disease of the kidneys that comes under your care which is possibly amenable to the most rigid, judicious and prolonged treatment and care. What constitutes this is the matter to which I wish for a little while to invite your most serious attention. I have little to offer in the way of treatment that is new or striking. I wish rather to have you use with greater promptness, care and persistence, the well-tried means that have already served us so well.

Rest in bed between blankets, and in a warm room, are essential points. Copious perspiration should be induced by the hot vapor bath. Free purgation is a very important point—not only to relieve the edema that is present—but also to reduce so quickly as possible the plethora of the renal vessels. This should be repeated occasionally if the condition of the patient will justify it. In most of my cases granules of elaterium have proved very effectual and perfectly safe. I have been better pleased with their effect than with salines. Dry cupping over the kidneys should always be used, and repeated as often as the surface will bear it. The most efficient form of using cups is to take four *large*, common, *thick*-edged tumblers and exhaust the air by burning alcohol. Dr. Tyson makes the important practical point that the cups should not remain too long on one spot, else the blood becomes stagnated in the capillaries and its onward movement prevented, and therefore there will be no derivation of blood from the organ involved.

Among diaphoretics, jaborandi or pilocarpin is the most efficient. Yet its use is not always free from danger. If there is a feeble heart, and above all, if there is pulmonary edema, it would better be avoided altogether. Dover powder and sweet spirits of nitre, aided by the hot air or vapor bath, will much more safely accomplish all that can be done in this direction.

In the use of diuretics, great care must be taken not to employ such as will add to the already existing trouble. I am not sure that it is not best in the early stages of the disease to avoid them altogether.

We have seen that rapidly fatal cases of acute Bright's disease have been caused by irritating diuretics, *e.g.*, turpentine, cantharides, oil of mustard, oil of wormseed, and certain salines, as chlorate and acetate of potash. Digitalis is a most useful agent in some cases, especially those in which the heart is disposed to yield to the increased arterial resistance that belongs to the disease. Its action is more as a cardiac tonic than as a diuretic. It is generally conceded that the diuresis that attends its use results from the improved movement of the blood caused in the renal vessels. In the later stages of the disease, combined with acetate of potash, as in Trousseau's diuretic wine, digitalis becomes very useful in washing away the debris in the malpighian tufts and the tubules.

In meeting the convulsions that attend uremia, the means already adverted to as calculated to relieve the renal congestion and the effusion, *viz.*, hot-air baths, cupping and other applications over kidneys and active purgatives, should be pushed with vigor. Agents to repress reflex excitability, such as chloral hydrate, and morphin hypodermatically, should be used freely and yet with caution, for with a feeble heart and greatly defective elimination, their use is not free from danger. Dr. Tyson lays much stress on his caution as to the use of opium, while Loomis, of New York, treats with apparent success cases of uremic convulsions with hypodermatic injections of half grain or more of morphia.

After the edema and renal engorgements have been relieved by the foregoing means, I have found large doses of tr. ferri chlorid in combination with an equal quantity of Squibb's sweet spirits of nitre very useful. I usually begin with half a dram doses of each, and unless the albumin steadily disappears, gradually increase it to a dram, always giving it largely diluted, and about an hour before meals. In a few cases, where the nitre was unpleasant to the patient, I have given

it with liquor ammonii acetatis. I have been in the habit, for very many years, of using the tincture of iron in large doses in cases of Bright's disease, after the acute stage had passed, with excellent results, it seemed to me, in preventing the recurrence of the disease, and also in securing the steady diminution of the albumin in cases of chronic forms of the disease. Dr. Gifford, of Avondale, has kindly given me some notes of a case in which the disease had persisted for at least twelve years, in which, under the use of half-dram doses each of tr. ferri chlorid. and Squibb's spirits eth. nitrosi, was followed in one month by a reduction of the albumin from twelve per cent. (in bulk) to five per cent.

A tolerably careful examination of recent works on practice has failed to disclose any direct statement of the efficiency of large doses of this drug in Bright's disease, with the single exception, that Prof. Osler, in his "Practice of Medicine," (1892) makes the statement that "Weir Mitchell, who has had a unique experience in certain forms of chronic Bright's disease, gives the tincture of the chlorid of iron in large doses, from half a dram to a dram, three times daily. He thinks that it not only benefits the anemia, but that it is also an important means of reducing the arterial tension."

Changed conditions of arterial tension require to be met by suitable remedies. When increased, small and frequently repeated doses of nitro-glycerin are useful, and if low, digitalis and strophanthus offer relief. If high tension is present with feeble impulse of heart, the combination of these three remedies, as proposed by Da Costa, will often afford great relief.

There is very much more in the history, symptoms and causes of chronic Bright's disease that it would be interesting to discuss, but I shall have for the present to pass them by, and in conclusion dwell briefly upon a few points bearing upon the treatment of this formidable disease. I am especially desirous of doing this because I have the feeling that the profession is too generally resting under the belief that chronic Bright's disease is necessarily incurable, and as a natural result of this belief they are less earnest and persistent

in their management of cases that fall under their care.

One of our recent writers, Delafield, says, "There seems no good reason for believing that we can directly influence the development of the lesions in the kidneys," though he admits, grudgingly, that such "development may be indirectly delayed by improving the general health of the patient." He looks for indications for treatment in three different directions:

1. To delay the progress of the disease by improving the general health.
2. To treat the symptoms that are not due to the kidney disease, and
3. To treat the symptoms which are produced by the kidney lesions.

It then appears that this late and most able writer on this fatal disease, completely "throws up the sponge" at the very outset of his contest with this antagonist. It is true that in his detail of means to combat urgent symptoms that attend the disease, he gives much that is calculated to meet the conditions present in the diseased organ, but it is to relieve the dropsy or the uremia, and not to cure the congestion and inflammation of the kidneys upon which these symptoms depend. Hence, when the urgency of these symptoms is relieved the treatment is relaxed and the patient is allowed to go about his business. Instead of holding him with a firm hand until every vestige of kidney trouble is removed and sufficient time has elapsed to make the cure assured, he is allowed to incur the anxieties of business, the vicissitudes of atmospheric changes and the strain that imprudent eating or drinking throws upon the kidneys, all of which are potent agents in developing the disease primarily.

Thus, Dr. Delafield details a case of a "man aged forty-one, who, six years before death, caught cold while bathing and suffered from dropsy, fever, prostration and scanty urine, which contained albumin, blood and numerous casts. After a few weeks of treatment all the symptoms disappeared and he returned to his business. He continued to enjoy good health for eighteen months. Then, in the winter, the urine became scanty, containing blood, albumin and casts. General anasarca was rapidly developed, which lasted six months. The urine from that time always contained

varying amounts of albumin and casts. For nearly two years after this time the man continued to *feel well*, was *actively engaged in business*, had no dropsy, but the urine still contained casts and albumin. Then the dropsy returned, but the *appetite* and the digestion continued good. There was no headache and the patient was intelligent and cheerful. The dropsy, a moderate diarrhea, and the change in the urine were the only symptoms. In two months the dropsy again disappeared, and the *patient returned to work*.

"After this time he never was so well. Edema of the legs was present much of the time. He became gradually more anemic and feeble, and finally died, with marked dropsy, about six years from the time of the first appearance of kidney symptoms."

We have here a full statement of a typical case of chronic Bright's disease, the origin, progress, treatment and results, given to us by a writer of acknowledged acuteness in diagnosis, learned in pathology and skilled in treatment. It is therefore a fair subject for criticism. Let us analyze it carefully and see wherein the fault lies, that this man did not get well instead of succumbing to the disease after years of suffering. A previously healthy man is stricken down with acute nephritis, a few weeks of treatment, no doubt thoroughly proper, for the symptoms (dropsy, etc.) yield. He is considered well and is allowed to go to work. What caution is given him to avoid fatigue, mental wear, errors in diet, exposure to cold or damp, and to keep the skin thoroughly protected, is not referred to. Nor do we learn that the urine is examined at stated periods, say monthly, to ascertain whether any trouble is still lurking or has been re-developed.

After eighteen months, in the winter, doubtless after improper exertion and exposure, urgent symptoms again appeared, to be relieved by treatment. This time albumin and casts continue to be present in the urine, yet in six months, as the dropsy had disappeared, he is allowed to go to work, which he continued some time, but steadily failed and in six years died, anemic and dropsical. It would seem that the *dropsy* was all that the doctor was trying to cure, for all the other evidences of nephritis were still present.

I make these criticisms of the management of the case with no unkind spirit toward the eminent practitioner who reported it. That there was error a careful analysis of the whole history of the case thoroughly establishes. Yet it is just the error that all of us are constantly making. It comes, it seems to me, from the foregone conclusion we all start out with in treating chronic Bright's disease, that it is incurable, that we can only relieve certain urgent symptoms. This being done, we turn our patient over to the course of life that originally developed his disease, even though there is all the time present unmistakable evidence that the nephritis is still going on. How many of us keep a patient with inflamed kidneys in bed, and persistently enforce the rigid treatment laid down at the outset of the acute attack, until every trace of inflammatory action is removed?

The honored Agnew gained a well-merited celebrity for success in the treatment of hip-joint disease in children. The foundation of this was the *rest* he so rigidly and unrelentingly enforced. On one occasion he was consulted by a lady from Ohio who had a son afflicted by this terrible malady. Suppuration had not occurred, and the surgeon had reason to hope that by perfect rest and appropriate constitutional treatment, a cure could be effected. He put the little fellow on a couch with light pulley extension. At the end of a year there was still evidence of inflammatory trouble in the joint.

Another year of rest was enjoined, but even at the end of this time the safety of the joint was not assured. There could be no relaxation without danger. "Madam, another year will be necessary," were the words of the great man. "Doctor, I will keep him in bed ten years if you assure me that it is necessary for my boy's safety," was the response of the stout-hearted mother. At the end of that time the boy came from his bed well and without deformity, and this good mother had her reward for her three years of devotion to her boy and of loyalty to her doctor. Would we not have more cures of Bright's disease did we show as much persistence in our care, and our patients as much loyalty and perseverance?

NEEDED IMPROVEMENTS IN THE WAYS AND MEANS OF SUPPORT OF CHARITY HOSPITALS.*

ELIZABETH H. C. HOWELL, M.D., WEST CHESTER, PA.

The never-ceasing toil, the irksome begging for funds, and the time expended by the board of managers of a hospital, and the still greater tax upon the time and strength of every physician who is upon the medical staff of such an institution, with the interruption to and necessary crowding of his private practice, seem to me strong points toward needed improvement in ways and means for the support of charity hospitals, lest the profession sacrifice too much in this direction, and do an injustice alike to themselves and younger physicians, whose hospital advantages are limited from want of room.

The community is crowded with suffering humanity. Rich and poor alike are victims of disease, and claim the care and skill of our profession. The law demands thorough preparation for the work. Years of study, years of toil, oftentimes years of privation and self-sacrifice, before enabled to practice, and then the state board of examiners glean only the fittest, regardless of the expenditure of time and means. Strong hedges are set about for the mutual protection of doctor and patient.

It is useless to recount the early and late experience of every physician. The houses of all classes, even at the present date, are usually but ill adapted to the care of the sick, and when coupled with inexperienced nursing, drive us to the use of hospital wards or private rooms in a hospital, as the case may be. We use them to secure the best care, at the smallest expense and the least risk to the patient, regardless of pecuniary loss to ourselves. That such motives suggested the founding of that first known hospital in Cesarea, far back in the fourth century, we are left to conjecture. But when a non-medical man of the type of St. Chrys-

ostom steps out from his pulpit, and from his great love of suffering humanity, opens his coffers, and at his own expense, establishes a hospital, such as he did in Constantinople, in the fourth century, we conjecture no longer, because we are sure that no motives of self-aggrandizement could influence him in this big-hearted gift to the suffering and sick. We also realize, that in those remote ages, our fellow-creatures must have suffered and died, for want of proper medical care and nursing, even more than they do now, in this age of advanced skill and enlightenment.

Looking through the history of the past centuries, we are impressed with the slow introduction of hospitals, in the earlier years. Three, only, were established during the fourth century, the third being at Rome, where, during the next five hundred years, twenty-four hospitals were started at varying dates. In the sixth century the Hotel Dieu was founded in Lyons, and even now almost equals its namesake, the Hotel Dieu of Paris. The latter was founded in the seventh century, and remodeled in the twelfth. It now covers over five acres of ground, and is the largest hospital in the world, after a growth of twelve hundred years.

The slow growth of those established, and the slow accession of others, seem strong evidence of the slow receptivity of the masses to the benefits derived from their use. Except in Rome, the hospitals during these ages seem to have been widely scattered. In the eleventh century Archbishop Lanfranc built one at Canterbury—but not until 1546 was London stirred to the establishment of St. Bartholomew's, followed the next year by Bethlehem hospital, and in 1553 by the now famous St. Thomas. From these dates on, the more rapid growth of such institutions and the wide-spread recognition of their value, has studded the

* Address of the retiring president at the January 12, 1897, meeting of the Chester County Medical Society.

civilized world with one or more, in almost every large city.

Now, they are extending into almost every community, which is the strongest evidence of the benefit they offer to the class of people for whom they are designed. The growing demand for such institutions is a living proof of the greater success of treatment in cases thus cared for.

The number of hospitals of recent date which have been successfully started by private individuals and largely supported by voluntary subscriptions is strong proof of the hold they have upon the hearts of the people. Old prejudices are fading away. We must be careful not to overstep prudence in these matters.

While we recognize the benefit of hospital training for every medical man and woman, do not let us lose sight of the oft-times unjust use of the physician's powers—his intellect, his skill and his time. "The poor we have always with us." It is our privilege to do for them according to our means. A successful physician must dedicate his life to his work. His services are often given when his own life and even that of his family are endangered. Without reference to the urgency of the call, he obeys, through all sorts of exposure, storm, heat or cold, and deadly infection. And although every physician is entitled to remuneration for his services, a larger percentage of charity work is forced upon the medical fraternity than upon any other profession or trade.

People of moderate means can enter our hospital wards, receive the advice of our most skilled physicians, have the benefit of trained nursing, with nourishment just suited to the case, and expensive medicines administered *ad libitum*, at either no personal expense or for a nominal charge (less than proper food and medicine alone would cost them in their own homes).

Is it not time that more state aid is guaranteed for our hospitals? How is it to be effected? We need some different legislation to insure some definite support, securing the running expenses of the hospital and moderate fees for the physicians of experience, who give so much of their valuable time and skill to hospital work. This, of course, would do away with private rooms in charity hospitals. Let

every institution thus aided become a state hospital, under the supervision of the state board of charities, with a sub-board of managers of local appointment.

For private patients, establish private hospitals, under medical boards, on a smaller basis, open to patients of practitioners in good standing at rates for board and nursing adapted to the circumstances of individual cases. This would meet the demand for rest and care for such medical cases as are best treated away from their homes, and where all the advantages of hospital conveniences could be secured at rates that would satisfy both doctor and patient. This latter suggestion arises from the query as to what right we have to appropriate so much time, space and attention to private patients at public expense. We plead help for the poor, and we bestow largely upon those able to pay at rates that do not cover the expense incurred for them. Are not our sympathies and our personal interests in such patients leading us away from the question of right in this matter, alike to the public and our brother practitioners?

Before closing these remarks, let me urge upon you the importance of rural hospitals for contagious and infectious diseases, on the cottage plan, for every city, town or district, at stations more or less frequent as the population and ease of access dictate. These should be conducted at local public expense for the poor, and have private apartments for those who can afford to pay. More thorough enforcement of quarantine laws should be insisted upon by the different boards of health, aided by physicians. There seems no reasonable excuse for quibbling, since Judge Albright's decision that, "a municipality may rightly and properly be held responsible for the maintenance of families quarantined by boards of health because of contagious diseases."

Could not a hospital for infectious diseases be established and conducted at less expense to a community than the families of such patients could be maintained where quarantine laws are strictly enforced? Certainly it could be done with less interruption to business and far less risk of mortality to the affected and spread of contagion to the inhabitants of a town or neighborhood.

CURRENT LITERATURE CONDENSED.

The Duty of a Physician to a Tubercular Patient and to the Public.¹

I have always made it a rule to forcibly impress on my patient and his family that tuberculosis is equally as contagious as some of the generally recognized contagious diseases, pointing out the way in which contagion may be brought about and also the manner in which it may be avoided. I do not believe that any physician, who, having recognized tuberculosis as existing in one of his patrons, should try to conceal the fact from him or his family. We all know how often this is done, and from mercenary motives.

First, we give our patient to understand that he has an incurable malady; next, he is informed of its being contagious, infectious and hereditary; and, finally, he is given to understand that he must live up to the laws of hygiene. If we go on as the majority of practitioners do, and leave our patient uninformed as to the disease and its way of infecting others, he will take no precautions to avoid contagion. He will do all of the things he should not as concerns spreading infection, and, what is still worse, if not already married, may decide to enter that state. Not only does his conjugal partner soon become contaminated, but in time a child is probably born which will inherit tuberculosis.

Patients should receive greater benefit from medication understanding the nature of his malady than otherwise. It is useless to try to conceal the fact that thousands have been allowed to remain ignorant of their true ailment and treated in this haphazard fashion until it is too late to derive benefit from the most approved treatment. Many cases of *half-way suspected* tuberculosis are allowed to remain half-way suspected. I think it is our duty to not half-way diagnose a case, but, if we do not know, ask some one else who does know. We cannot make a positive diagnosis without ocular or microscopic verification.

I have made it a rule to have a microscopic examination made in every case coming under my observation, and not being satisfied with one examination where no tubercle was found, but having resource to another, as it is possible that there may be no tubercle in the first specimen and yet be found in the second.

We owe it to our patients to prevent their marriage, if single; and if married, to aid them, as far as our knowledge goes, to prevent conception. To the public we owe our influence, our time, our work, and the use of our knowledge in aiding and abetting legislation by which marriage of tubercular subjects would be prevented. Furthermore, the laity should receive more information on the subject.

Let it be made illegal to conceal a case of tuberculosis from the board of health, and an equal violation of law not to keep the case under continued observation. Contrive some means to prevent consumptives from attending theatres, conventions, parties, etc., and abolish the custom of having one or two general communion cups. Empower the board of health to adopt some suitable sputum cup, and where the patient is too poor to buy them, let them be furnished by the State. Cause to be printed literature giving to the laity an intelligent understanding of tuberculosis, its causes and prevention.

We should advise the friends of a consumptive patient not to go too close to him, and to be careful in what they eat and drink, that it has not been exposed to tubercular germs. We must advise our patient, whether we are to treat him or not, to adhere strictly to his physician's advice—take nothing unless sanctioned by the physician.

Let him choose a practitioner in whom he has confidence, and then remain with him, as he will probably understand the case better than any patent-medicine man. Advise regularity of habits, cleanliness, pure, fresh air, and, where possible, a dry climate, preferably cold.

Have all sputum and dejections disinfected or burned. I saw not many days

¹ S. B. Taylor, M.D., in *Columbus Medical Journal*.

since where a physician removed a sarcoma, and as he was leaving the house saw the chickens eating it. In this way often tubercular matter may be disseminated; the offings are cast into yard for the fowls to eat, and later some one eats them and is in danger of infection. By a combined effort in the right direction, explaining to the laity the nature, cause, prevention and gravity of tuberculosis, I have no doubt that in ten years' time we can lower the mortality nearly one half, with nothing more than the present modes of treatment and combat.

The Removal of Embedded Powder-Grains.²

Embedded powder-grains are of importance chiefly when they are situated in the face. When powder is blown into the face some of the grains are apt to strike the eyeball and lids, so that most of these cases come to the notice of ophthalmic surgeons. If the eye escapes destruction, the patient is usually allowed to go with such disfigurement as may be caused, and congratulated that the result is no worse.

The result of attempts at extracting powder-grains depends upon whether the grains are superficially or deeply embedded. In the former case they will be thrown off with the epithelium and leave no disfigurement; while in the latter there will remain permanently in the tissue some portion of the powder, which will become gradually diffused and cause a permanent and very disagreeable disfigurement.

A great deal of useless, or worse than useless, effort and time have been spent on "powder-grains" on the supposition that they were actually "grains" embedded in the tissue, and as such could be picked out. A powder "grain" is a mechanical mixture of very finely-pulverized charcoal, saltpetre and sulphur. As soon as it becomes embedded, and subject to the influence of the tissue fluids, the saltpetre—potassium nitrate—dissolves away, the sulphur also shortly disappears, and there is left only the finely divided charcoal diffused through the tissue. At first this is massed in a small area of tissue, where it gives the appearance of a black grain, capable of removal as a single mass. But

even at this time it has become so incorporated with the tissue that its removal is impossible without the removal of certain portions of the tissue itself, and, as time goes on, the extent of tissue thus involved increases with the diffusion of the black particles. Thus the problem of the removal of powder-grains, when deeply embedded, is simply the problem of removing the tissue in which they are diffused with the smallest destruction of tissue not yet implicated.

In most cases a large part of the original disfigurement is due to the powder lodged on or in the epithelial layer, and this will be thrown off in a few days in any case. To favor its separation, an old remedy, and one of the best, is poulticing; another is blistering, another, the use of a strong spray directed upon the part. A still more recent proposition is that of Dr. Weiss, who injected hydrogen dioxide with a fine-pointed hypodermatic needle directly into the powder deposit. These methods may all be resorted to in a recent case with much superficial deposit of powder. But, when the deposit masses were deeply embedded, they have, in my hands, all proven ineffective.

For the removal of such deeply embedded grains I resorted, more than four years ago, to the use of the galvano-cautery. This does not explode or burn out the powder "grain" as a powder "grain;" for, as such, it does not exist, even when the patient first comes under treatment, but it destroys the limited area of tissue in which the minute particles of carbon are diffused, and the resulting slough carries them off.

Each particular point of deep disfigurement must be touched. Hence it is a remedy not applicable to old cases, where the stain has become diffused through the whole skin of the part. The earlier it is applied the less the amount of tissue it is necessary to destroy.

The repeated applications of the cautery required in some cases (I have made three hundred at a single sitting) are too much for even the strongest nerves, and a general anesthetic must be resorted to. On account of its inflammability ether is out of the question. Ethyl-bromid I have found rather unsatisfactory, because the

²Edward Jackson, A.M., M.D., in *Albany Medical Annals*.

patient, coming out from under the influence of the drug very quickly, unless very closely watched, will frequently begin to wince and move so as to interfere with the exact application of the cautery point. Chloroform, therefore, is preferable as a general anesthetic in these cases. Where the number of grains to be destroyed is not very large, and particularly if they are massed in a small space, local anesthesia, by the infiltration method of Schleich, I have found satisfactory.

Use a small cautery tip, kept at a white heat, thrust quickly into the tissues to the necessary depth and extent, and quickly withdrawn from them far enough to avoid any unintentional burning of the skin. It is well to make the first burning pretty thorough, but in bad cases it is impossible to always judge correctly as to the depth of the tissue involved, and a repetition, after a few days, may be necessary.

Considerable patience is required to effect the complete removal of the smallest grains; but this is essential for a perfect result. For grains embedded in the cornea, the operation is precisely that of cauterizing the cornea as for suppurating ulcer. Any grains passing more deeply into the eye are beyond the reach of this method.

Little after-treatment is required. The conjunctiva may be frequently bathed with boric-acid solution. The sloughs of the skin separate, in a very few days, without much reaction and without any treatment whatever.

Fruit as Food.*

There is no doubt that the palate is in the main a good guide to be followed in the selection of one's food, and can, in the majority of instances, be depended upon as a reliable dietetic mentor.

Our climatic conditions are such as to render a diversified diet peculiarly necessary. During the winter season fats and meats are demanded in large quantity by the system to furnish heat to withstand the cold, and tissue to replace the increased waste going on under the stimulus of a lowered temperature. The heat of summer imposes other and quite different

necessities, as witness the distaste for fats, and the instinctive cravings for fruits and vegetables. It has been said that "climate affects diet mainly by the supply it affords." In tropical and semi-tropical countries fruits and vegetables grow in rich profusion. It would, therefore, almost seem as if they were intended as man's natural hot-weather food. Whether this be true or not, it cannot be doubted that they contain many of the elements best adapted to our needs during the summer months, most agreeably combined, and requiring the least expenditure of energy to utilize them.

While fruits serve many excellent dietetic purposes, they, however, cannot alone support nutrition unimpaired, a mixed diet being at all times necessary for the maintenance of the normal. Fruits are not all of equal nutritive value. The date, plantain, and its variety, the banana, rank highest in this respect, each containing sufficient nutriment to support life for a long period. The banana has assumed a very important place among fruits brought to this country. It is, unfortunately, necessary in shipping to the United States to pick the fruit while still green, and it is often but imperfectly ripened when eaten. This probably accounts for the fact that many persons cannot digest them. When well ripened and fresh no such difficulty is experienced. Flour made from the fruit is highly valued as an invalid food. The uses of fruit are as follows:

1. To furnish variety to the diet.
2. To relieve thirst, and introduce water into the system.
3. To furnish nutriment.
4. To supply organic salts essential to proper nutrition.
5. To stimulate the kidneys, increase the flow of urine, and lower its acidity.
6. To act as laxatives.
7. To stimulate and improve appetite and digestion.
8. To act as anti-scorbutics.

A QUESTION OF FRUIT. — Nurse—"I thought you would like to see the new baby. Isn't it awfully cunning and sweet?" Papa—"Beautiful! Lovely! It is a peach."

Nurse—"Yes, sir; but aren't you glad it isn't a pear?"—*Medical Age.*

* Dr. Arthur R. Elliot, in *Dietetic and Hygienic Gazette*.

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PHILADELPHIA, SATURDAY, APRIL 24, 1897.

EDITORIAL.

SUICIDE AMONG PHYSICIANS—A REPLY.

The American Medico-Surgical Bulletin for April 10th, notes that the *Chronicle* of Augusta, Ga., has taken some interest in this subject as discussed by the REPORTER and suggested by the *Bulletin*. The *Chronicle* and the *Bulletin* both have understood The REPORTER to say that the main cause of suicide is an insane impulse. While The REPORTER believes this to be the main exciting cause, it mentioned others as predisposing causes, and in most instances it is mere sophistry to presume to say whether the predisposing or the exciting cause was the more important.

The *Chronicle* asks why druggists, men working on high buildings, dynamite and poison-makers and others who also have the means of death always at hand, do

not imitate the doctors. This question is not pertinent save in the case of druggists. Every one has the opportunity of suicide always at hand except for the forcible interference of others, but, fortunately, nearly every one has an antipathy—which is very far from being the same thing as cowardice—to meeting death by a mutilating procedure. For example, the physician, tired and discouraged on his return from a distant patient, does not jump off a bridge, or open a vein in his wrist, or resort to similar means which are available to every one. He waits until he gets to his office, and, thinking matters over, takes some poison.

There is this difference between the suicide of such and of those others men-

tioned by the *Chronicle* (excepting the druggist): If the physician takes poison, there is no reasonable doubt that he meant to kill himself, although the attempt may be made to conserve his moral reputation at the expense of his skill by saying that he took an "overdose." But if Mike falls from a building, or Hans is gathered from a field in which he has heated dynamite or pounded the can, who can tell whether his death was accidental or suicidal? In general, the occupations mentioned by the *Chronicle* (excepting, again, that of the druggist) are those of men of little mental development, of few ambitions, and, therefore, of few disappointments, so that they are not of a class which is prone to suicide except when out of work, and at that time, of course, the trade opportunity for suicide would be absent.

Why do not druggists commit suicide by poisoning? The answer to this question is that they do. The *Reference Handbook of the Medical Sciences* makes physicians, druggists and chemists the most prone to suicide of all professional men, and because of the accessibility of poisons. If asked when the doctor most typically commits suicide, we find that the favorite time is late in the evening, but before he has gone to bed, at a time when there is least liability to interruption, and when he is most fatigued. The druggist has no such corresponding time. His drugs are simply behind a screen or in a side room opening into a store which is empty very seldom during the day and which is apt to be crowded in the evening. When the druggist finally shuts up his store, he, usually, is too tired even to think of suicide.

Rereading the article in *The Reporter* of February 27, it is difficult to understand how the impression could have obtained that the accessibility of drugs was

considered the main element in the frequency of suicide among physicians, although, undoubtedly, it is the important immediate cause. The *Chronicle* thinks The *Reporter* pessimistic (possibly it is concerning the present outlook for the medical profession), and suggests a fit of indigestion—which was not the case, as its views, right or wrong, are the result of considerable study, and with as absolute freedom from personal bias as is possible.

The *Chronicle*, as is usual for a lay journal, expresses flattering opinion of the lofty scope of the medical profession, and concludes: "The giving of happiness to others should make the physician's life full of joy and thanksgiving." The *Reporter* applauds the sentiment, but would remind the *Chronicle* that the undertaker's life is not necessarily gruesome, that the excitement and charm of journalism wear off some times, that the humorist is often the reverse of happy, that the soldier is seldom blood-thirsty, and that even the clergyman has to fight the tendency to regard his life-work from the standpoint of a livelihood.

We grant that there is every sentimental reason why a physician should enjoy his work; we will go so far as to say that, personally, no part of life has been so intense a joy as that spent in a hard and successful fight for some one's health, or, yet greater, for a human life, and that we can imagine no social or financial gain that could recompense us for abandoning practice. But, sentiment and personal feeling weigh for little in this consideration.

Statistical authorities all agree that the medical profession furnishes a relatively high percentage of suicides. Aside from an exciting cause in opportunity, a high rate of suicide means a high degree of unhappiness, and if either the *Bulletin* or the *Chronicle* can explain this unhappiness on a theory more probable or less

blameworthy than the average poverty of the profession, so abnormal when compared to its average responsibilities and social needs, The REPORTER would be glad to receive such explanation.

The arguments of the *Chronicle* are too convincing for proof. They tend to show, (1) that the physician has no more opportunity for suicide than any one else; and

(2) that he ought not to be so predisposed to suicide as persons in other lines of business. Yet statistics demonstrate that, in spite of strong temptation and a frequent opportunity to cover up its suicides, the medical profession has almost the highest mortality from this cause.

These opinions may be wrong, but, at least, they are not in direct conflict with fact.

CORRESPONDENCE.

SCHLEICH'S "KLINIK" IN 1896.

EDITOR OF THE REPORTER:—Spending last August in Berlin, I had frequent opportunities of visiting Schleich's "Klinik," indeed, my visits were almost daily. The readers of The MEDICAL AND SURGICAL REPORTER know how strongly I have been impressed with the value of his method of local anesthesia in surgery—indeed, it seems to me one of the greatest advances in medicine in the latter part of this century. It seemed to me that the number of patients was much increased, and it was gratifying to me to be informed that greater attention was being given in Germany to Schleich's method, partly in consequence of my reports published in American journals.

The following incident may be of interest to some readers: About the middle of September, 1895, upon entering a car at Berlin, to take a steamer at Rotterdam for the United States, I was so fortunate as to be given a seat just opposite a distinguished German surgeon and teacher, who was on his way to Hanover, to perform an important operation. We were consequently together for several hours, and in the course of our conversation, I asked him if he had ever seen Schleich—he did not live in Berlin. He told me that he had not, and I begged him to go, narrating to him many of the operations I had witnessed. He promised me to visit the "Klinik" the next day, stopping for that purpose in Berlin on his way home.

Of course, one of the first questions I asked Dr. Wittkowski (Dr. Schleich's chief assistant), when I met him in 1896, was whether this surgeon had kept the promise made me, and the reply was, "No, but he sent two of his assistants, who got thoroughly acquainted with Dr. Schleich's mode of anesthesia by infiltration." Subsequently the surgeon referred to, Dr. Wittkowski told me, had to be operated upon for hemorrhoids, and he hesitated between local and general anesthesia in his own case, and finally decided in favor of the latter; the operation was successfully done, ether being used, but an attack of purulent nephritis followed, from which he happily recovered, and now has become an advocate of Schleich's method, and a large number of successful cases have been reported from his own "Klinik."

Returning from this digression, the operations that I saw in August, were similar to those I witnessed the previous year, such as removal of ingrowing toe nail, of tumors, etc. The anesthetic mixtures employed were the same that were used the previous year—their formulæ were presented in a paper read before the Philadelphia County Medical Society, November, 1895, and published in The MEDICAL AND SURGICAL REPORTER. I heard nothing, saw nothing of eucaïn. The general dressing for wounds was still glutol, a mixture of powdered gelatin and formalin. In a letter written me February

20th, Dr. Wittkowski states, "We are using glutol powder in nearly all our surgical cases, and have the most splendid results you can imagine."

In at least two patients, I saw general anesthesia employed; one of these was an adult, who had several teeth or "stumps" to be extracted, and in the other, an angioma was to be removed from the anterior part of the neck of an infant, probably a year old. Dr. Schleich employs one of three anesthetic mixtures; of these, the following are the formulæ:

First. Petroleum ether, five parts; chloroform, fifteen parts; and sulphuric ether, sixty parts. Second, Petroleum

ether, five parts; chloroform, fifteen; sulphuric ether, fifty. Third. Petroleum ether, sixty; chloroform, fifty, and sulphuric ether, eighty. The anesthesia caused by any one of these mixtures is quite rapid in its production, and quickly passes off.

I may add, in conclusion, that a new edition of Schleich's "Schmerzlose Operationen" will soon appear, and a monograph upon "Sterilization of the Hands by only Mechanical Means," by Dr. Wittkowski. Dr. Schleich has not yet visited our country, but I hope he will at some not distant time.

THEOPHILUS PARVIN, M. D.

PHILADELPHIA, March 27, 1897.

ANTITOXIN, THE NEW REMEDY FOR DIPHTHERITIC CROUP.

EDITOR OF THE REPORTER:

"Be not the first by whom the new is tried,
Nor the last to lay the old aside."

That has always been my motto, so I did not quickly endorse the antitoxin method of treating diphtheritic croup. I listened to the discussion of the subject last May in Harrisburg by several members of the Medical Society of Pennsylvania, but still remained indifferent.

For many years I have treated diphtheritic croup, and found the result always fatal until a few years ago, when the treatment by calomel in heroic doses was suggested. I have used the calomel in every case since that time, and can place six recoveries to its credit, though some of these cases I saw in consultation with other physicians.

Some time in December last, Dr. Clarkson, of this place, used the antitoxin, which was the first time it was used in Mifflin county. His little patient recovered, as did also one treated by Dr. Harshberger, and another under the care of Dr. Sweigart. With these three recovered, and no failures to the credit of the antitoxin, I employed it in the next case I got. Recovery followed. I have used it in six cases of diphtheritic croup; four of these were my own cases, and two I saw in consultation with other physicians. Of the six cases, five have recovered. In all

of them the calomel treatment has been used also, though the doses have not been exceedingly large. Mulford's antitoxin has been used in all the cases, and the amount given at each injection was 10 cc., which contained 1000 immunizing units. One injection only was used in those of the cases that recovered, and two injections in two of the cases that recovered, with an interval of about eighteen hours between the injections.

The fatal case died about fifteen hours after using the first dose. From all I can learn I am inclined to believe that the immediate cause of death was cardiac paralysis.

In witnessing the result after using the antitoxin, I am impressed with the idea that its action is almost miraculous.

The Israelites waited long on the banks of the Red Sea for a Moses to lead them across, and we of the medical profession have waited long for an efficient remedy for diphtheritic croup. I think we may now shout "Eureka!" I have knowledge of the use of antitoxin in twelve cases in this community, and of this number ten have recovered. In one, if not in both of the fatal cases, it was not used sufficiently early in the attack.

I have used the antitoxin in one case of diphtheria without the membrane invading the larynx. I had used the calomel

and the iron, and made local applications to the throat in the ordinary way, but new patches on the tonsils continually appeared. After one injection of the anti-

toxin the throat trouble rapidly subsided, and the child was convalescent in a couple of days.

LEWISTOWN, Pa., March 26, 1897.

ABSTRACTS.

URIC ACID AS A FACTOR IN THE PRODUCTION OF HAY FEVER.*

In 1885 it was my privilege to present for your consideration the subject of tonsillitis, at which time I pointed out what appeared to me to be the cause of certain forms of this disease—viz., uric acid. The paper was thoroughly discussed, and some of the gentlemen present stated they had never heard of the theory before. To-day, I believe, this is a generally accepted theory. I further wish to present for your consideration the effect of uric acid not only upon the mucous membrane of the throat, but upon the entire respiratory tract. Especially would I call your attention to uric acid as a very important factor in the production of hay fever and asthma. In 1892, while in conversation with a medical friend, I was induced to purchase a book entitled the *Relation of Alimentation and Disease*. This book contains a chapter on asthma, its cause, pathology and treatment. The chapter begins thus:

"All heavy horses are hogs. Heavy horses do not know when they have eaten enough. Heaves in horses corresponds to or is the same kind of disease in them that asthma is in man. All asthmatic people are unhealthy feeders and over-eaters. They have a craving to keep the stomach full."

This and many other similar expressions I read to my asthmatic patients, and almost without exception they expressed themselves in very forcible language as to the idiocy of the author of that chapter. Some of them admitted, however that their

attacks came on shortly after eating, and others said they were small eaters; and in some instances I knew this to be true. The author of that book goes on to say that "asthmatics are all dyspeptics of an especial type. They are all flatulent with carbonic-acid gas. Their stomachs are full of fermenting products. This special type of dyspepsia always develops a 'gravelly diathesis.'"

Although I do not accept the teaching of this author or agree with him in his mode of treatment, I must, however, acknowledge that my first insight as to the disease, or rather one of the important cause of the factors in the production of hay fever and asthma, came from the perusal of that book. I have constantly kept in mind the thought that the respiratory mucous membrane was in some way or other irritated by uric acid. I not infrequently see a peculiar reddened and glazed appearance of the mucous membrane of the pharynx, and often an edematous soft palate and pillars of the fauces, with dilated and tortuous blood-vessels, which, after exhausting all other methods of treatment without success, will immediately clear up under salicylate of sodium.

The exact mode of production of uric acid in the body is still a matter of uncertainty, but according to the majority of workers in this field, it is undoubtedly associated with nitrogenous metabolism, and the acid represents an imperfectly oxidized form of nitrogenous material. The final destination of uric acid is its conversion into urea, but from lack of perfect oxidation in the tissues this process is checked.

*NORTON L. WILSON, M.D., of Elizabeth, N. J., ex-President of Union County, N. J., Medical Society; Laryngologist, Rhinologist, and Otologist, Elizabeth General Hospital, etc., in the *New York Medical Journal*.

I determined to examine the urine, the blood, and the sputum of these patients and see if it was not due to excess of uric acid within the system. From the sputum I gained but little knowledge, because it was sometimes the secretion from the upper pharynx, sometimes from the bronchial tubes, and always more or less mixed with saliva. From the blood I gained this fact, that when the patients suffered most the blood was the most strongly alkaline (at which time it is richest in uric acid). I found the urine in some cases loaded with uric acid or urates, and in others it contained but little. I worked along this line, and it was uphill work, for many times when I supposed I had established this theory to my entire satisfaction I was met by some obstacle which almost annihilated my pet theory. Occasionally, however, I would see something which would give me fresh courage, and to-day I feel confident that uric acid is a potent factor in the production of hay fever and asthma. Of course, I allude to the asthma following hay fever.

In reading Dr. Haig's book on uric acid I was led to see why so many of my cases did badly on salicylate of sodium. He does not mention asthma as being due to uric-acid diathesis, but I think I can establish that fact, and he will help me to do it by showing me errors in the administration of certain drugs. He has shown that quinine, in small doses, squeezes uric acid out of the spleen, thus producing uric acidemia, while a larger dose—six to fifteen grains of the sulphate—will have the action of a sulphate, which clears the blood of uric acid and thus benefits these cases. I have frequently benefited asthmatics by ten grains of quinine, and I know this to be the basis of a popular "quack cure."

He has shown that opium, cocain, antipyrin, caffein, strychnin, acids, iron, lead, lithia, manganese, calcium chlorid, acid phosphate of sodium, some sulphates, chlorids, mercury, the nitrites, and some hypo-sulphites, either directly or indirectly raise the acidity of the blood or form insoluble compounds with uric acid. All these substances diminish the excretion of uric acid and bring about its retention and accumulation in the body. They drive the urates out of the circulation into

the joints and fibrous tissues, also into the liver, spleen, and other organs.

Acidity of urine bears a fairly constant relation to urea, both tending to rise and fall together, and the relation given by Haig (one of acidity to 6.6 of urea) is very constant. "Whatever raises urea raises acidity, and *vice versa*. On the other hand, the alkalies (except lithia), phosphate of sodium, and compounds of salicylic acid, increase the excretion of uric acid in the urine, and for a time also increase the amount of it in the blood by raising the alkalinity of that fluid." If these statements are correct—and I have no reason to doubt them, as they agree with some observations made by myself—I should at least be able to make some impression upon my hay-fever patients, if, as I have stated, uric acid is a factor in its production. Since Bostock first described the affection, in 1819, it has been written upon largely by English and American authors, and I think it is pretty well established that three important factors are essential for the production of the disease:

1. The predisposing constitutional condition.
2. An external irritant.
3. A pathologic condition of the nasal mucous membrane.

The predisposing constitutional condition is a neurosis, and who can say that this condition of the nervous system is not due to irritation by uric acid? It is a recognized fact that neurasthenia and lithemia go hand in hand.

The second factor is an external irritant. I care not whether this be the emanation from certain plants, dust, odors, pollen, or any other mechanical irritant, my experience with mucous membranes has shown me that uric acid is a very important irritant, and I can see no reason why it should not act as such in autumnal catarrh.

The third factor is a pathologic condition of the nasal mucous membrane. This may or may not be the result of irritation, and, so far as I can see, the uric-acid theory combines all three of these factors, for it not only induces a neurosis, but acts as a local irritant, which brings about pathologic changes of the nasal mucous membrane. It is not necessary for me to say anything about the symptoms of this pecu-

liar disease, as you are all familiar with them, but I can not but allude to the paroxysmal sneezing, which is very apt to be worse about 4 A.M., or just as the patient arises in the morning. In most of the text-books it is set down that the sneezing is due to irritating dust or pollen grains. This I must deny, inasmuch as there is no dust or pollen grains in the bed-chamber at that hour in the morning. In my opinion it is due to the neurotic tendency, and until I found that it occurred on dark or rainy days I ascribed it to the action of sunlight. I am now of the opinion that it is due to uric acid, since you will remember the blood at this hour is strongly alkaline, and there is more uric acid circulating in this fluid.

This brings me to the important part of this paper. Can we do anything to relieve our hay-fever patients? and before giving you my experience I want to quote Dr. Bishop, of Chicago, who has recently published a very interesting article on this very subject, and I may say truthfully that I was not aware when I wrote my previous remarks that others were working in the same field. This, however, encourages me to continue my observations, for I now feel that I am not alone in my belief.

Dr. Bishop says (in the *Laryngoscope*): "An excess of uric acid in the blood causes hay fever, or nervous catarrh. Attacks can be stopped by precipitating the excess of uric acid from the blood by rendering the latter less alkaline with an acid treatment." He, too, refers to Haig, and has evidently absorbed some of the ideas which caught me. He goes on to say: "While pursuing the study of gout and allied diseases dependent upon lithemia, I was struck with the close analogy between the conditions present, with their local manifestations, and the various phenomena of hay fever. The theory that the paroxysms of hay fever are due to a uric-acid toxemia is not antagonistic to the present status of medical opinion or surgical treatment; but, on the contrary, explains questions that were inexplicable before. The uric-acid hypothesis explains why some persons suffer from attacks under certain conditions in winter as well as during the warm months."

The periodicity of hay fever has a counterpart in migraine, which comes once in every seven, ten, fourteen, or thirty days, for years or for life. But enough has been said to lay the base line of a treatment that has proved vastly more successful than any other thus far devised.

I must admit that I am not so sanguine as Dr. Bishop, and yet I want to lay before you, in an impartial manner, the results of my labors in this direction. You will remember a few years ago several eminent rhinologists, chief among whom was Dr. Daly, of Pittsburg, and Dr. Roe, of Rochester, advocated the theory that it was "a local chronic disease, upon which the exciting cause acts with effect." They had in their minds, however, that the exciting cause came from without and not from within. I have cured some cases by removal of hypertrophies, spurs, polypi, etc., but I am satisfied they would still have their hay fever had I not made some change in their diet. This is the age when the medical profession at large is recognizing lithemia, not only by swollen and painful joints, but by disease of the eye, the ear, the throat, the heart, the spleen, the liver, the gastro-intestinal tract, and, in fact, almost every organ in the body will show evidences of uric-acid poisoning.

Just as the dermatologist often recognizes eczema as an expression of uric acid, so do I recognize hay fever as a lithemic condition. If uric acid is the important factor in the production of hay fever and asthma, why is it that it usually makes its appearance about the middle of August, especially when most people eat but little meat during the summer? In health about five to eight grains of uric acid are secreted every twenty-four hours, and it is readily soluble in the blood, which is slightly alkaline. If there is increased formation of this acid no harm results so long as it is promptly eliminated and the ratio between it and the urea is not disturbed. Anything which will produce a low nutrition will produce uric-acidemia. About the middle of August you will find a marked change in the weather, when it is usually cooler and often damp for a day or two. Invariably, as soon as this change comes you will find the hay-fever symp-

toms begin. I have records of the weather for the past six years, and you can almost to a certainty pick out the date of attack by the drop in temperature. This year it was about August 8, and again on the 14th, when the highest temperature was 74° and the weather cloudy. The table shows that my first cases this year began on the 10th, and six of them on the 15th.

The sudden drop in temperature diminishes perspiration, raises acidity, freeing the blood from uric acid and driving it into the tissues. In two days the temperature suddenly goes up, and then you have a uric-acidemia which irritates the already nervous system and mucous membranes. Nutritive disturbances are brought about by over-drinking, especially when combined with deficient muscular exercise. Once irritated, the respiratory tract is kept in a constant state of irritation until the uric acid is driven from the blood by the onset of cold weather.

I do not mean to say that every case of uric-acid diathesis is a hay-fever subject, any more than I would say every such case had eczema, but I do mean to say that there is a very close relationship between uric acid and hay fever, and I do say that every patient having a neurasthenic tendency, if you please, and a pathologic mucous membrane of the respiratory tract is irritated by uric acid, and thus far my observations have led me to suspect it in every case of periodic hyperesthetic rhinitis. In the treatment of these cases the greatest care must be exercised. You must ever keep in mind that alkalies, salicylate, etc., produce a uric-acidemia so long as there is an increase of uric acid within the system. During the attack they must be used with care and in small doses. I have certainly increased the severity of an attack by giving ten grains of salicylate of sodium three times a day. During the attack it is better to free the blood from uric acid by the administration of an acid. Aromatic sulphuric acid or phosphoric acid acts very well. After freeing the blood, gradually extract the uric acid from the tissues by two or three-grain doses of sodium salicylate (given three times a day), cut off the acid-producing foods, such as meat, beer, wine,

cider, lemonade, etc. Keep your patient's nervous system in the best possible condition by proper feeding, hygienic measures, and nerve tonics, if necessary. See that no polypi, spurs, or hypertrophies exist in the nostrils. Begin a crusade against uric acid six weeks or even two months before the time of attack.

For the local relief, I have found menthol and camphor in liquid albolene, very gently sprayed into the nostrils, effectual in some cases. There are cases, however, which are apparently irritated by this solution, and for these I have found, if I would contract the tissue with a six or ten per cent. solution of cocain, and then gently coat the turbinate with a thin film of flexible collodion, they would experience relief. For the itching and irritation of the conjunctiva, hot water or yellow ointment rubbed into the conjunctiva will afford relief.

I can not close this paper without expressing my belief of the use of lithia. For the past three years I have failed to see a case of uric-acid diathesis benefited which I could ascribe to the action of lithia. In other words, the amount of water which these patients are obliged to take is, in my opinion, the factor for good, and not the lithia. Haig goes so far as to say that "lithia is a good solvent of uric acid in the test-tube, but in the body not only is it a poor solvent of that acid, but it actually combines with the phosphates in the blood and prevents its action on uric acid, so that the fact is lithia retards rather than increases its excretion."

I have hinted at rather than given any definite plan of treatment, and hope you will next season be able to give me the benefit of your experience. I think I can truthfully say that every patient on my list has received some benefit so far as the hay fever goes. This can not be said of their asthmatic symptoms, however, as three of them suffered quite as much as in previous years, but I have seen enough of the treatment to encourage me to begin early next season, and I feel confident I can at least mitigate their symptoms.

No mikado has ever traveled outside his own country.

SOCIETY REPORTS.

CHESTER COUNTY MEDICAL SOCIETY.

Regular meeting at West Chester, Pa., January 12, 1897.

DR. BENJAMIN THOMPSON was elected president for the ensuing year.

DR. JACOB PRICE read a paper entitled

The Curability of Bright's Disease.

(See Page 518)

DISCUSSION.

DR. HOSKINS.—I would like to ask Dr. Price if, in his opinion, tr. ferri chlor. is well borne in these cases?

DR. PRICE.—I have seen no trouble result from its use. I think the manner of administering the drug has much to do with the success in its use. I give tr. ferri chlor. one-half dram, with spts. nitre one-half dram, two hours before meals, well diluted. I think this is the best time for administration. The dose may be gradually increased. I have no doubt but that large doses of tr. ferri chlor. at meal time interfere with digestion. The tr. iron is preferable to Basham's mixture, the iron in the latter being converted into acetate.

DR. HOSKINS.—Dr. Tyson does not recommend the use of iron in the treatment of nephritis; says it locks up the bowels, and thus interferes with excretion.

DR. U. G. GIFFORD.—I have had a case under my care in which, at the suggestion of Dr. Price, I used the tr. ferri chlor. and the results seemed to strongly commend the treatment. I have watched the case for over twelve years while the patient was under the treatment of a number of different consultants, and have never seen any diminution in the albumin excreted until the patient came under my care, and iron was used. I carefully examined the urine for three successive mornings before beginning the treatment, and invariably it contained albumin to the extent of eight per cent. of the total bulk of the urine examined. At the end of thirty days' treatment I again examined a specimen, and found a diminution of three-eighths in the quantity of albumin.

DR. HOSKINS.—I would like to ask Dr. Price whether he has ever used benzoic acid in the treatment of kidney disease?

DR. PRICE.—I never had any experience with it in Bright's disease. Purging, diaphoretics, with local blood letting in suitable cases, is the best and most satisfactory treatment of these cases. I use hot air baths, free purgation two or three times a week, and keep the patient between blankets in a warm room until the

kidneys have had opportunity to entirely recover. Jaborandi is sometimes useful, but must be used carefully, especially when there is tendency to pulmonary edema. I believe that the tr. ferri chlor. is the best thing that can be given after the acute symptoms have subsided. I give it in large doses for long periods of time. I believe that one great obstacle to the successful treatment of Bright's disease, especially in the chronic forms, is the prevailing belief that it is incurable. It seems to me that there is no sufficient reason why inflammations of the renal tissues should be necessarily incurable.

DR. HOSKINS.—Do you use diuretics in acute conditions?

DR. PRICE.—I think that diuretics are not suitable in the acute stage. In chronic cases mercuric chlorid is useful to modify nutrition of the ganglionic centers, which is commonly depressed in the disease in question.

DR. ANGEL.—I would like to report a case seen in consultation with Dr. Weir Mitchell some twenty years ago, which has bearing upon the valuable paper presented to you by Dr. Price this afternoon. The patient, the widow of Dr. ———, had Bright's disease in a serious form. Her limbs were so swelled and edematous that I have punctured them very frequently, with the effect of draining away gallons of water. Before coming under my charge she was treated by Dr. Paulding, who apparently got tired of her, and turned her over to me. I gave her tr. ferri chlor. in moderate doses, with large draughts of skimmed milk, and at the end of five weeks Dr. Weir Mitchell was called in consultation. No change was made in the treatment, except that the dose of iron was largely increased. The patient made a complete recovery, afterwards going to California and resuming her lecturing tour. She died some years later of reported "inflammation of the bowels," probably appendicitis.

Address of retiring president, Dr. Elizabeth H. C. Howell.

Needed Improvements in the Ways and Means of Support of Charity Hospitals.

(See Page 524.)

DISCUSSION.

DR. PRICE.—The subject presented in the paper of Dr. Howell has a present importance, and includes a difficulty which will have to be solved. The question of free medical attend-

ance upon patients who are able to pay is a growing evil, and, from the point of interest to the medical profession, as well as the moral effect upon the laity of such misdirected charity, it must be carefully met.

DR. DUNN.—The subject is valuable and timely. A large number of patients are received gratuitously in hospitals for treatment who have no claim to such service. But a greater amount of abuse comes from free dispensary service. While in London and Edinburgh during the past summer I was informed that fifteen per cent. of the applicants treated were able to pay

a moderate fee for the services of a physician. I believe a similar or even exaggerated condition exists in New York, Chicago and Philadelphia. As a rule physicians are willing to see walking cases in their offices, and there can control the abuses. The possibility of extensive abuses is the reason the physicians of West Chester have objected to dispensary service in connection with this hospital. Many city institutions do an injury not only to the profession, but are instrumental in encouraging extravagance and pauperism among the people they serve.

PERISCOPE.

The twenty-second annual meeting of the American Academy of Medicine will be held in Parlor "C" of the Continental hotel, Philadelphia, May 29 and 31, 1897. On the first day the meeting will be called to order at 2 P.M. in executive session, open to its membership only. At the conclusion of the executive session an open session will be held.

Provisional Program.—The associated duties of the physician:

I. "The True Principles on which the Medical Profession Should Be Associated and the Character of the Resulting Organization." Leartus Connor, M.D., of Detroit.

II. "Physicians' Mutual Aid Societies." John B. Roberts, M.D., of Philadelphia.

III. "Quid pro Quo—Present and Future." C. C. Bombaugh, M.D., Baltimore, Md.

IV. "The Relation of the Physician to the Public Press." Solomon Solis Cohen, M.D., of Philadelphia.

V. "Some Relations of Author, Publisher, Editor and Profession." George M. Gould, M.D., of Philadelphia.

VI. "Medical Reviews." Walter L. Pyle, M.D., of Philadelphia.

VII. "The Influence of a Liberal Education with Reference to Medical Ethics." Elmer Lee, M.D., of Chicago.

VIII. "Hospital Abuse." W. L. Estes, M.D., South Bethlehem, Pa.

IX. "Result of a Year's Endeavor to Lessen the Dispensary Abuse in the Rhode Island Hospital, Providence, R. I." F. T. Rogers, M.D., of Providence.

X. "Are Physicians Up to Date?—A Sociologic Inquiry." Charles McIntire, M.D., of Easton, Pa.

The Academy will take recess at about 6.00 and reconvene at 8.00 in open session.

XI. The President's Annual Address.—J. C. Wilson, M.D., of Philadelphia.

On the second day an executive session will be held at 10.00 A.M., open session at 11.00 A.M.

XII. "The Relation of Alcohol to Preventive Medicine." J. W. Grosvenor, M.D., of Buffalo.

XIII. "The Truth About Calomel." Everett Flood, M.D., of Baldwinville, Mass.

XIV. "The Great Physician of the Revolution: A Doctor sans peur et sans reproche." A. L. Gihon, M.D., Medical Director, U. S. N., retired.

XV. "Where Shall We Put Up the Bars? A Plea for Preliminary Education." A. L. Benedict, of Buffalo.

Discussion: "The Relation of the College to the Medical School."

XVI. "The Side of the Medical School." Bayard Holmes, M.D., College of Physicians and Surgeons, Chicago, Secretary of the Association of American Medical Colleges.

XVII. "The Side of the College." Ethelbert D. Warfield, LL.D., President Lafayette College, Easton, Pa.

XVIII. "The Side of the University." William Pepper, M.D., LL.D., Ex-Provost, University of Pennsylvania, Philadelphia.

At the conclusion of this discussion there will be a short executive session.

The reunion session will be held at the Continental hotel May 31, at 8.00 P.M.

By a standing rule of the Academy, the price for the supper is limited to two dollars a plate. Fellows are at entire liberty to invite their friends to enjoy with them the Academy's annual social function. Those who may be thinking about attending are requested to send their names either to the chairman of the committee of arrangements, the president, or the secretary. The price for the ticket can be paid to either of them at any time. The Trunk Line Association extend the time of the concession granted to the American Medical Association to include the earlier date of the Academy. Fellows desiring to avail themselves of this will please—(1) Pay full fare to Philadelphia and secure a certificate of that fact from the agent selling the ticket. (2) This certificate must be endorsed at Philadelphia by Dr. W. B. Atkinson, secretary of the American Medical Association, and countersigned by an agent of the Trunk Line Association. (3) When so endorsed and countersigned the

presentation of the certificate will secure you a return ticket by the same route at one-third fare.

The Council will meet on Saturday morning, when the application for Fellowship will be acted upon. Kindly forward any application you may have to the secretary so soon as convenient.

Considering the subject when, in operating for septic pelvic disease, it becomes necessary to remove the ovaries, it may be advisable to remove the uterus also, Fernand Henrotin, M. D., Chicago (*Am. Gyn. and Obst. Journal*), reaches these conclusions:

1. In operating for pelvic septic disease, either by the abdomen or the vagina, the condition of the ovaries should be the first object of special consideration, and no part of such an organ, when apparently healthy, should be removed.

2. When the ovaries, an ovary, or a part of an ovary, is left, the uterus should never be removed unless it is the seat of otherwise incurable disease.

3. The removal of diseased fallopian tubes, even in their entirety, is no warrant for the removal of healthy ovaries or a healthy uterus.

4. Even if the tubes and ovaries are entirely removed, the uterus should be spared, if its removal will entail appreciable increase in the danger of the operation to the patient.

5. In very young patients, or such as have what is known as infantile uteri, the uterus need not be removed.

6. In the vast majority of cases when, in operating for pelvic disease, it becomes necessary to remove the ovaries, it is most advisable to also remove the uterus, because it serves no further purpose in the economy, and because it remains a serious element for future harmfulness.

7. When in operating by the abdominal method, the cervix is found apparently healthy, it is advisable to make a supra-vaginal amputation and to leave the cervix, putting in stay stitches as recommended by Baldy to prevent displacement of pelvic fascial.

With greater experience to be gained principally by examination of ablated uteri, we may learn to distinguish inoffensive varieties, and if so will leave all such undisturbed, for the smallest atom of human flesh which is harmless and does not disfigure, should always be sacred to the surgeon.

The results of operative treatment in nineteen cases of focal epilepsy are recorded by Sachs and Gerster. The term, "partial or focal epilepsy," is made to include not only the cases of traumatic origin, but also those in which localized convulsions are associated with other diseases, more particularly with early infantile cerebral palsies. The authors who in 1892 published a somewhat gloomy view of the results of the surgical treatment of focal epilepsy now state that they have gradually been convinced that if the

cases for operation are selected more carefully, and if the surgical technic is perfected, the prognosis need not be stated quite so gravely, and that it is possible not only to relieve many, but to cure some of the cases of epilepsy. The following conclusions are drawn from a consideration of the clinical histories and the results of the nineteen cases in which operative treatment was practiced by Gerster: (1) Surgical interference is advisable in those cases of partial epilepsy in which not more than one, or at most two, years have elapsed since the injury or the beginning of the disease which has given rise to the convulsive seizures. (2) In cases of depression or other injuries of the skull, surgical interference is warranted, even though a number of years have elapsed; but the prospect of recovery is brighter the shorter the period of time since the injury. (3) Simple trephining may prove sufficient in a number of cases, and particularly in those in which there is an injury to the skull, or in which a cystic condition is the main cause of the epilepsy. (4) Excision of cortical tissue is advisable if the epilepsy has lasted but a short time, and if the symptoms point to a strictly circumscribed focus of disease. (5) Since such cortical lesions are often of a microscopical character, excision should be practiced even if the tissue appears to be perfectly normal at the time of operation; but the greatest caution should be exercised in order to make sure that the proper area is removed. (6) Surgical interference for the cure of epilepsy associated with infantile cerebral palsies may be attempted, particularly if too long an interval has not elapsed since the beginning of the palsy. (7) In cases of epilepsy of long standing, in which there is in all probability a widespread degeneration of the association fibres, every surgical procedure is useless.

Cholera is a filth disease, originating from filth, and borne about from place to place by swarming of flies, presumably from a filthy (as they are not always cleanly in their habits) cholera-infected centre, says A. Beale in the *Indian Medical Record*. This is illustrated, I think, pretty clearly in what occurred whilst doing duty at a hospital in 1887. One particular day I was rather surprised and annoyed at finding my house (hygienically satisfactory) invaded by a great number of the ordinary flies; they remained settled about the place for three hours or so, notwithstanding persistent efforts being made to dislodge them, by means not only of driving, but also of sulphur fumigation. I was in good health previous to this fly visit, and that very night at about 8.30 I went out, but had to return in an hour, as I began to feel very unwell. I was, within a few hours after this, attacked with all the symptoms of cholera, and had a very narrow squeak for life. Thanks to energetic and efficacious treatment, I recovered. It was fully twenty-one days after the attack before I could walk without the help of a stick: my strength had been so much exhausted. My case

being sporadic in this locality at all events, was guardedly diagnosed as one of choleraic diarrhea. Nevertheless, there developed two more cases of cholera amongst the troops in barracks, situated about 500 yards from my domicile, in a day or two after I was laid low. The focus of infection in this instance is fairly apparent. Sudden invasions, and just as sudden departures of flies, should be viewed with suspicion. Cholera was prevailing at the time of which I write to a certain extent in the city.

In a striking statistical paper, M. Saito Kokufu says in the *Lancet*, that at the end of the last decade suicides in Japan, reached their maximum—viz., in the years 1885 and 1886. This recrudescence corresponded with a notable rise in the cost of living. In fact, the number of suicides year by year increases or diminishes in sympathy with the rice crop. The age most favorable to suicide is twenty for females and twenty-five for men. After twenty five women seldom make away with themselves, while it is not till they have passed their fortieth year that men may be regarded as beyond the dangerous period. From these facts M. Kokufu draws the inference that the women, once married, accept life as it presents itself, and that the men remain a long time at the mercy of ambition and avarice. Poison and firearms are not the means by which suicide is mostly effected, being found to be uncertain and "inconvenient." But every Japanese of either sex carries a long waist belt, which enables him or her on the slightest provocation to put an end to life by strangulation. It is in the great centres of population—not in the rural districts—that most suicides occur. About half the tragedies are due to cerebral derangement, a fourth to reverses of fortune, an eighth to bodily suffering, and the residue to privation, remorse, thwarted love, or domestic quarrels.

Considering vulvo-vaginitis in Children, Dr. H. B. Shedfield (*Am. Med. Surg. Bulletin*) concludes: (1) Infectious vulvo-vaginitis in children is of gonorrheal nature; the diplococcus present in the purulent discharge is invariably identical with that of Neisser, decolorizing by Gram's method. (2) The infection can be conveyed through common privies, baths, beds, clothing, etc. (3) The symptoms accompanying the disease are far less severe than those described in most text-books. (4) Most of the complications are preventable. (5) The value of boric acid or mild silver nitrate solutions as prophylactics of purulent ophthalmia is very doubtful. (6) Silver nitrate in strong solution is a reliable abortive of purulent ophthalmia, if used in the very earliest stage. (7) The mere presence of gonorrheal discharge in a small girl, without injury to the genitalia, does not prove that rape has been attempted. (8) Physicians in charge of asylums, or similar institutions, should be on their guard not to admit girls with vaginal discharge, unless they can con-

vince themselves that this is not of gonorrheal origin. (9) The subject in question deserves a more careful study by the gynecologist, pediatricist, as well as by the general practitioner and medical jurist; and by their united observation we should in the near future be enabled to dispel any and all doubt as to the real nature of infectious vulvo-vaginitis in children.

Phenocoll Hydrochlorid in Influenza.

—In an epidemic of influenza in the Dosolo and Corregioverde districts of Italy, Dr. G. Villani employed phenocoll hydrochlorid exclusively in the treatment of some 400 cases. He was led to employ the drug because of the reputation it had already obtained in Italy for the treatment of malaria. The results were such that he continued to use phenocoll hydrochlorid for influenza in preference to other antipyretics.

The hydrochlorid salt was found most suitable for administration. It is a fine white crystalline powder, inodorous, with a slight bitter saline taste, readily soluble in water, the solutions neutral in reaction, and readily taken. For adults powders were generally prescribed; for children, solutions in syrup. The dose usually administered was 30 to 45 grains daily, in 8 grain portions, for an adult, and a solution of 15 grains, to be taken in small quantities during the 24 hours, for a child.

The effect, generally, was felt after the first or second dose, the fever abated, there was almost an instantaneous disappearance of cephalgia, and a gradual cessation of nervous symptoms. It was rarely that four or five days passed before a normal stage was reached. Recent cases were most easily dealt with. No grave complications were met.

Villani reaches the following conclusions:

1. Phenocoll hydrochlorid exerts a powerful antifebrile action for a period varying between 8 and 4 to 6 hours.
2. It is a useful antiseptic.
3. It is a useful antipyretic, and analgesic against neuralgic symptoms.
4. It is easy of administration not only to adults, but also to children, the slight brackish taste of the solution being easily covered by a corrective.
5. The system does not become accustomed to the drug and requires larger doses.
6. Its administration does not cause nausea, vomiting, collapse or any other disturbance.
7. The reduction of temperature is regular and continuous, being accompanied by a slight perspiration, but rarely by copious sweating.—*Rassegna Medica*, 1896, No. 14.

Cures of pruritus vulva and ani, itching piles, scabies, and scrotal eczema are reported from the use of resinol by W. Caspari. Several of these cases had proved very obstinate under other treatment, notably solutions of corrosive sublimate and carbolic acid. The drug has no caustic properties, and has excellent effects in parasitic skin diseases.

A new method of estimating the uric acid in the blood has been devised by Dr. Luff (*British Medical Journal*). Although this is not yet perfect, it will probably, with the discovery of a better solvent for the acid, supersede all others. Dr. Luff holds the view put forward by Garrod and supported by Latham, that in health uric acid is formed in as well as excreted by the kidneys; he supplements this by the suggestion that in diseases such as leucocythemia, in which the presence of uric acid in the blood does not induce gout; it is also derived from the nuclein of the tissues. He finds no uric acid in the blood of healthy mammals or birds, and holds that its appearance in the blood is usually conditioned by an affection of the epithelium of the renal tubules. He thus presents a coherent theory of the pathogenesis of gout, but one which rests at present upon circumstantial evidence. Dr. Luff's own researches have brought to light many new facts, and have at the same time exploded some venerable fallacies. He has shown conclusively that diminished alkalinity of the blood affects neither the solubility of uric acid nor the deposition of sodium bi-urate, and that increased alkalinity fails to increase the solubility of deposits of the latter. He has broken new ground in his investigations upon the saline constituents of meat, milk, and vegetables in relation to the chemistry of uric acid. He finds that the ash of vegetables exercises a remarkable inhibitory power over the decomposition of sodium quadri-urate, and the consequent formation of the comparatively insoluble bi-urate; and, further, that the presence of this ash greatly increases the solubility of the bi-urate itself, while the saline constituents of meat diminish its solubility. He has thus justified the new and important deduction that the opposed qualities of meat and vegetable diets in respect of the induction of gout are due not to their proteid constituents, as formerly believed, but to their inorganic salts.

An interesting case of Addison's disease with recovery is reported by Cervellini (*Rip. Med.*). The patient complained of general weakness and pain in the epigastrium, which had necessitated his giving up work a year previously, and had for the same period noticed a progressive, brown coloration of the skin. On examination the mucosæ were pale without any pigmentation, but otherwise all the classical signs and symptoms of Addison's disease were present. Nothing abnormal was found on examination of the chest. The heart showed some dilatation, with slapping of the first sound and irregularity of rhythm. The appetite was extremely bad, and there was diarrhea. The left testicle was found to be enlarged with some superficial swelling; the cord was also thickened. The patient stated that this swelling had always been there, but lately had increased considerably. The author advised removal of the testicle on the ground of its being tuberculous, and the operation was performed by Manega, who found the organ full of tuberculous nodules, with some cystic degeneration.

There was also a tuberculous deposit extending along the cord. The omentum contained tubercle. The patient was convalescent from the operation in ten days, and it was then found that his symptoms had considerably decreased. The pain in the abdomen was so much reduced that palpation could be borne. The pigmentation of the skin had likewise diminished. Under a liberal diet and potassium iodid the patient continued to regain health, and in a short time left hospital to return to his work in two months. His color was then natural, his nutrition good, and the debility had completely disappeared. The author considers that the primary tuberculous focus in this case was the left testis, and he believes that its removal, together with the opening up of the peritoneal cavity, caused the tuberculosis to subside. He discusses the feasibility of a similar treatment in other cases where there is reason to suppose there is a tuberculous deposit in the peritoneum as well as tubercle of the suprarenals.

The necessity of examining the urine of every pregnant woman is dwelt upon by Eklund, of Stockholm (*Edinburg Medical Journal*), and he makes the statement that such instructions should be given in all midwives' hand-books. If the urine be found to contain albumin, the midwife should be competent to order hot baths, flannel underwear, rest in the recumbent posture, mild diuretics and laxatives, beef-tea with parsley, seltzer water with boiling milk, milk food, boiled fruit, weak coffee, tea, and chocolate, compound liquorice powder, etc. If this hygienic treatment does not within a certain time, say a month, cause the disappearance of the albumin, a physician should be called. It is a matter of great importance that the pregnant woman should learn to procure for herself daily evacuations of the bowels, especially towards the end of pregnancy and in beginning labor. For this purpose dietetic means should be employed chiefly, but in case of failure mild aperients should be used, such as cascara, senna, frangula, compound liquorice powder, and enemata of salt and water. Of the very greatest importance during pregnancy, and especially during the puerperal state, is the care of the kidneys, the avoidance of all that would tend to increase the functional activity of these organs, the maintenance of equilibrium, and the proper division of labor between the skin, digestive apparatus, and the kidneys. If any organ can bear a greater exercise of function it is the skin, and next in order of tolerance the intestinal tract; the lungs are far more sensitive, but the kidneys most of all. No puerperal woman should be permitted to leave her bed until her urine is free from albumin, if possible.

The following suggestions as to how to write a medical paper, by Dr. Northrop (*Atlanta Med. and Surgical Journal*), will be heartily endorsed by all editors:

Scratch out the introduction and begin where the subject really begins. Condense the

body of the paper. End the paper where the subject ends. Successful papers, almost without exception, are those written with one definite and predominating thought, on which every fact is brought to bear and toward which every argument is directed. Conclusions alone are, as a rule, sufficient, with pertinent facts so marshaled as to give them proper support. The various minute details of the stages by which these conclusions are reached are usually uninteresting, and had better be touched on lightly or omitted entirely. An expert editor, by remorselessly stripping away the padding, is usually able to make an abstract that will present all the author's ideas and conclusions in one-fourth the space of the original paper. Many a man who has had something of real value to say has first smothered the life out of it with padding, and then dug a grave and buried it in the midst of a five-column paper compiled from some text-book. It would be far better for professional literature if every man would content himself with writing what he really knows, instead of writing what he has only read. One new fact discovered, one new, live, practical idea, is a sufficient subject for one paper, though it may be a short one. Two or three subjects for a single paper will render it weak or actually inert. A shot-gun is adapted to small game, but large game is only brought down with a rifle. A single paper on a live subject, if it hits the mark squarely, will do more to establish a man's reputation than ten diluted and watery compilations.

A Fatal Case of Poisoning by Red Oxide of Mercury, on account of the infrequency of deaths from this cause, seems worthy of allusion, says Dr. Louis T. Mitchell, M.D., of Chicago, in the *Boston Medical and Surgical Journal*.

The patient gave a history of having been sick three days with vomiting and diarrhea. Absolutely denied eating or drinking anything that could give rise to his symptoms and also denied having taken any poison. He complained only of severe pain in the abdomen, and especially on the right side; made frequent attempts at vomiting, but ejected nothing save a little clear or greenish fluid occasionally. According to his statement, he had considerable diarrhea before coming to the hospital, but he only had one passage during his stay in the institution, which was serious and colored reddish. Just before death, he acknowledged having taken an unknown quantity of "red precipitate."

The necropsy showed the base of tongue and mucous membrane of larynx of a deep purplish hue. Stomach about one-quarter distended with food, colored grayish-pink; small lumps of the mineral visible here and there. The stomach walls were coated with a layer one-quarter of an inch thick of pultaceous matter. On washing this off, the mucous membrane appeared pale; it was much softened and could be readily scraped off by the finger nail. The duodenal mucous membrane was also

softened, and the contents here showed much larger lumps of the mineral. No trace of it was found beyond here. The lower part of the small intestine contained considerable fluid similar to "rice-water."

The light perception power is an aid to diagnosis and prognosis in diseases of the eyes, but the instruments hitherto in use to determine the power have all failed in exactness as the standard of light used varied and the shape of the object was also a factor in the result. Henry Wall suggests a new instrument for the purpose, which consists of an oblong box, one end covered with a piece of cloth like a photographic camera. In the other end is an opening fitted with nine discs of ground glass, arranged so that they can be removed one by one. A candle stands thirty-three millimeters outside of the box in another box that prevents any flickering of the flame. After remaining five minutes in absolute darkness, the subject put his head at the large open end of the box, one eye is bandaged and the head is covered with the cloth. The ground glass discs are then removed one by one, and he is instructed to state the moment he perceives the sensation of light. The standard of measurement is the number of discs through which he can perceive the light. By this instrument the disturbances due to nicotin, alcohol, albuminuria, diabetes, etc., can be differentiated and the chances of recovery estimated. The greatest loss of light perception power is found in pigmentary retinitis.—*Ophthalmic Review*.

Inunction with oil of turpentine for acne rosacea is recommended by Dr. D. Betz (*Journal des praticiens*). He discovered its virtue by chance. A woman had bronchitis, and he prescribed for her frictions of the chest with the oil. She had also acne rosacea, which he had treated previously without success. A few months later, to his great surprise, he found that she no longer presented any trace of the acne lesions, and learned that this result had followed upon her rubbing the turpentine oil on the rosaceous patches. Thereupon he recommended the treatment to a man who for seven years had had acne rosacea which had resisted all treatment, and under the turpentine inunctions the lesions disappeared in less than a month.—*N. Y. Med. Jour*.

The cure of *pruritus pudendorum* by the use of tannin is claimed by Heidenhain (*Weiner Med. Blatt.*), who says the following treatment has never failed: He applies compresses wet with a hot solution of a table-spoonful of tannin in a quart of water. The vagina is previously douched with an antiseptic solution and a wad of cotton wet with the tannin solution is laid between the labia. This is done every night.

A resume of 240 cases of authenticated absence of one kidney, together with three cases observed by himself is given by E. Balowitz in *Virch Arch (Pediatrics)*. He excludes those cases of simulated absence of one kidney, which was really due to the intergrowing of both, or to a hyperplasia of one. His conclusions are as follows: Absence of the left kidney is of more frequent occurrence than that of the right; at least this is true in the male subject, in whom this abnormality appears nearly twice as often as in the female. Deformity or change in position of the remaining kidney is rarely met with, only a more or less intense hypertrophy is usually present. Besides the kidney, all its vessels, and nearly always the foundation of the ureters are generally absent. Changes in the bladder are also very rare. Occasionally the suprarenal capsule of the same side is also absent. Abnormalities of the genital organs, which are more frequently found in the female, exist nearly without exception on the side of the absent kidney, and affect in the first instance the canals of exit, rarely the ovaries, which, however, may frequently be atrophic. Very rarely, and then only in the female, is the whole genital apparatus undeveloped.

A case of multiple duodenal ulcer is reported in *The Lancet* by Mr. Coverley Veale. The patient was 68, temperate, advanced in senile dementia, who made no complaint of physical troubles. Two days before death he had characteristic "coffee ground" vomit, causing a diagnosis of gastric ulcer for which appropriate treatment was made. This was followed by two more attacks with two convulsive seizures supervening. Death followed a few hours later. At the necropsy there was found in the first part of the duodenum four ulcers, all within two inches of the pyloric valve. The largest ulcer was of the size of a split pea, its edges showed considerable induration, and it involved all the coats of the bowel, the peritoneal covering being much thickened locally. The second ulcer was similar in size, but its edges were less indurated and it was more superficial. The remaining two ulcers were quite small, and merely involved the mucous membrane and submucosa. All these ulcers were deeply colored by the deposition in them of disorganized blood products. The esophagus and stomach showed similar deposits on their walls, whilst the feces in both small and large bowels were almost black in color from the same cause.

Phlegmon of the hand is frequently followed by considerable disability, which may become permanent. This is due to the binding together of the soft parts by contracting scar tissue, and the process may go so far as to cause ankylosis and even subluxation of joints. It is possible, in a great measure, to avoid this unwished-for result by insisting upon active and passive motions from the time of the very beginning of the healing process. The fre-

quency of the motions is more important than the force exerted. Pain after the exercises shows that they have been too vigorous. The joints should be moved several minutes at a time, amounting in all to two or three hours in the course of a day. The patient himself can usually carry out this treatment if the dressings are properly arranged. Do not wait till the wounds are healed, or your patient may be irreparably disabled.—*International Journal of Surgery*.

The disadvantages of primary hysterectomy in addition to removal of pus tubes and ovaries, according to Alex. H. Ferguson, M.D., Chicago (*Am. Gyn. and Obst. Jour.*) are:

1. It takes longer to do the operation, and the mortality is, in my opinion, higher.
2. The primary hemorrhage is greater and the secondary more liable to ensue.
3. Greater shock.
4. More liable to injure ureters, bladder and rectum.
5. The patient is less of a woman, anatomically and socially.
6. The vagina is shortened.
7. Hernia of the vagina is liable to follow. I had such a case quite recently.
8. A healthy uterus is often removed on account of the difficulty of diagnosing, beforehand, the amount of disturbance caused by the inflamed tubes, ovaries and uterus respectively.

The rarity of nasal polypus in children is considered in a recent paper by A. Rupp. He cites the case of an infant four months old, who was brought to him because the little one was unable to nurse satisfactorily, and presented symptoms of difficult breathing. The father of the child stated that he heard something flap up and down in the left nostril. Examination revealed a pinkish pedunculated polypus, "large enough almost to occlude the left nasal vestibule." It was friable and attached high up. The removal was simple. No syphilitic or catarrhal history could be obtained. Good result followed the extirpation of the tumor.

Atlantic City physicians have organized a city medical association, with the name of The Atlantic City Academy of Medicine. The purpose of the association is—

1. The interchange of medical thought and opinion and the fostering of debate on and consideration of medical matters.
2. The consideration of matters of public good that might properly come within the province of the medical fraternity.

The officers elected for the ensuing year are: President, W. M. Pollard, M.D.; vice-president, W. Blair Stewart, M.D.; secretary, E. C. Chew, M.D.; treasurer, Walter Reynolds, M.D.; reporter, Joseph F. Edwards, M.D.; board of governors, Boardman Reed, M.D., E. E. Reilly, M.D., and the president elect of the society.

NEWS AND MISCELLANY.

The American Therapeutic Company is offering a prize of a set of blood-testing instruments, etc., for the best report of various cases treated with Carnogen. Details will be found in *THE REPORTER* for April 10.

The Victims of the Cocain Habit have become so numerous in Chicago that an ordinance has been introduced prohibiting the sale of remedies for catarrh and other diseases, which contain cocain. In the last two months over forty victims of the drug have appeared in the police courts and elsewhere. Several of them have been well-known men and women, who say they were brought to their present condition by using catarrh cures.—*Columbus Medical Journal*.

Two cases of malignant disease of the kidney are recorded by E. Willett (*Birmingham Med. Review*). The first occurred in a child of 10 months, who died from recurrence eleven months later. The growth was a glandular carcinoma according to some, and a cystic adenoma in the opinion of others. The second case was removed in 1893 from a young man of 19, who made a good recovery and had remained well; its structure was carcinomatous, and it weighed two pounds.

Evidently the author of the subjoined acrostic was imbued with the poetry of his subject as well as utilitarian ideas as to the remedy. It is as ingenious a thing of its kind as has lately been published.

LA GRIFFE.

All the nerves gone on a bender
Not an organ is exempt,
Teeth and scalp and muscles tender,
Icy chills, the bones pre-empt.
Kaleidoscopic are the symptoms legion,
As they over-run the system,
Making life a weary region,
No one able to resist them.
Is there nothing that will cure?
Antikamnia will, I'm sure!

FREDERICK B. SUTTON, M.D., Atlanta, Ga.

The delivery of a giant female fetus is recorded by G. Olano in *Et Monitor Medico*. It was otherwise well-formed, weighing 10,000 g., and measuring 68 mm. in length. The mother, a VI-para, aged 39, had had previously three normal and two premature confinements; the father, aged 42, was well-formed, tall, and muscular. There was non-medical and purely subjective evidence to the effect that the woman was many months past the full term. After four days of labor pains and an unsuccessful attempt to delivery by forceps the patient died, the fatal issue having been ushered in by slight convulsions. The necropsy was performed by Olano, in the presence of several of his colleagues; and the pregnant

uterus was found lying to the right side with its fundus near the liver, and containing the giant fetus above referred to. It was a vertex presentation, and the various parts of the fetal body were proportionately large. The cephalic measurements are not given.

The semi-centennial meeting of the American Medical Association, which will be held in Philadelphia June 1, 2, 3 and 4, 1897, bids fair to surpass in the character of the entertainment, the scientific papers and the number in attendance any meeting which has heretofore been held. The committee in charge have been able to obtain large and roomy places of meeting for the general meetings and the section meetings, all within a single block and within very short walking distance, or immediately adjacent to the largest and most comfortable of the Philadelphia hotels. For the week preceding and following the meeting, the committee of arrangements have also arranged for clinical courses which will be open without charge to all physicians who may visit the city at that time. These courses cover every branch in medicine and its specialties, and will afford visitors the opportunity of seeing the active clinical work of all the great teachers of Philadelphia, which is now, as it has been for so many years in the past, in every respect the medical centre of the United States.

The astounding and almost incredible claims that puerperal fever has not diminished in the last fifty years in spite of aseptic and antiseptic teachings was recently made by Cullingworth before the Obstetric Society of London. From 1847 to 1880, inclusive, the mortality from puerperal fever was 1.6 per 1,000 births, while from 1880 to 1895 it has risen to 2.6 per thousand. The highest mortality rate is found in districts where unskilled and ignorant midwives flourish, and where the sanitary conditions are most unsatisfactory. Although puerperal fever is practically a thing of the past in the best lying-in hospitals, there has not been a corresponding diminution in private practice. This he attributes to carelessness in minute details, and to the feeling of many practitioners that a few drops of carbolic acid or tincture of iodine in the water in which they wash their hands is strict antiseptics. He believes that simple antiseptic precautions conscientiously adopted would render puerperal fever as rare in private practice as it now is in the best lying-in hospitals. The statistics of the New York State Board of Health show a more lamentable condition. If the number of births is estimated at about half again as many as the total deaths, the mortality from puerperal fever is at least twice as high as in England and Wales. It would seem as if it might be wise to give to the proper authorities power to investigate all deaths from puerperal fever, and thus curtail the unnecessary and disgraceful waste of life due to ignorant or careless criminal negligence.—*Albany Med. Annals*.